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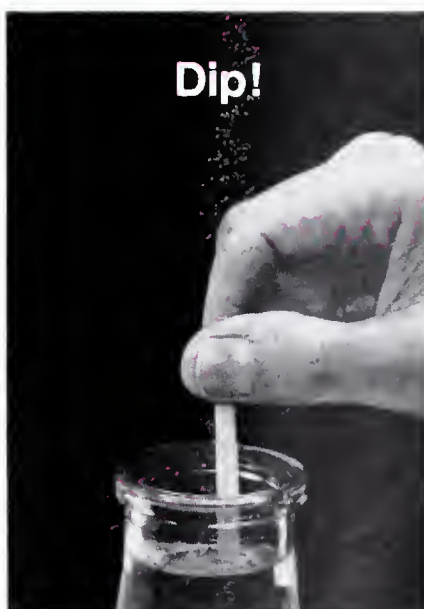
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THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

June, 1974

Vol. 71 No. 1

FORT SMITH, ARKANSAS



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Both often



● Predominant psychoneurotic anxiety

● Associated depressive symptoms

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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor

neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive dis-

orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or

two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

For further information on this subject, the following references are provided:

1. Henry BW, *et al*: *Dis Nerv Syst* 30:675-679, Oct 1969.
2. Hollister LE, *et al*: *Arch Gen Psychiatry* 24:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970.

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or over-sedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

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anxiety states
with associated
depressive symptoms



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THE
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Arkansas

MEDICAL SOCIETY

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ALFRED KAHN, JR., M.D., Editor
1300 West Sixth Street Little Rock, Arkansas

MR. PAUL C. SCHAEFER, Business Manager
214 North 12th Street Fort Smith, Arkansas

LITTLE ROCK BUSINESS OFFICE
114 E. Second St. Little Rock, Arkansas

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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BEN N. SALTZMAN
MOUNTAIN HOME
PRESIDENT
ARKANSAS MEDICAL SOCIETY
1974-1975

PROCEEDINGS

98th Annual Session

ARKANSAS MEDICAL SOCIETY

Camelot Inn and Convention Center, Little Rock

April 28-May 1, 1974

**First Meeting
HOUSE OF DELEGATES**

The first meeting of the House of Delegates convened at 1:00 P.M. on Sunday, April 28, 1974, in the Golden Knight Room of the Camelot Inn, Little Rock with Speaker of the House Amail Chudy presiding.

Invocation was led by Past President C. Lewis Hyatt.

The Executive Vice President, Mr. Schaefer, called the roll of delegates. The following delegates, officers, and members seated as delegates by action of the House were present:

ARKANSAS, R. H. Whitehead; ASHLEY, Donald L. Toon; BAXTER, John Guenther; BENTON, Ed McCollum; BOONE, Mahlon Maris; BRADLEY, George F. Wynne; CHICOT, Charles D. Blackmon; CLARK, P. R. Anderson; CLEBURNE, W. M. Wells; COLUMBIA, Charles L. Weber; CRAIGHEAD-POINSETT, Frank James, James Sanders, James Robinette; CRAWFORD, Millard C. Edds; DALLAS, John Delamore; DESHA, Howard R. Harris; DREW, Charles E. Hicks; FAULKNER, Jimmie J. Magie; GARLAND, Edwin Harper, Ronald Bracken, Patrick Knight; GRANT, Clyde Paulk; GREENE-CLAY, J. Larry Lawson; HEMPSTEAD, Forney Holt; INDEPENDENCE, Jim E. Lytle; JEFFERSON, T. E. Townsend, R. T. Brooks; JOHNSON, Boyce West; LAWRENCE, Ralph Joseph; LEE, Dwight W. Gray; LOGAN, William R. Daniel; MILLER, Donald Duncan; MISSISSIPPI, Francis E. Utley; MONROE, N. C.

David; OUACHITA, Cal R. Sanders; PHILLIPS, C. P. McCarty; POPE-YELL, James M. Kolb, Jr.; PULASKI, Edgar Easley, Raymond Biondo, James L. Smith, Curry Bradburn, John Satterfield, James Weber, William Jones, David Newbern, Frank Westerfield, Winston Shorey, William Riley, Philip J. Deer, Ray Jouett, J. Mayne Parker, and George Mitchell; SALINE, Helen Rountree; SEBASTIAN, Homer G. Ellis, Carl Williams, Robert P. Hughes, Jr., Kenneth Lilly, Paul Anderson, and Art Martin; UNION, C. E. Tommey, B. L. Moore, Jr.; VAN BUREN, John A. Hall; WASHINGTON, W. Ely Brooks, Wendell Ward, Coy C. Kaylor; WHITE, James L. Stinnett; COUNCILORS, John Kirkley, Eldon Fairley, John Bell, Paul Gray, L. J. P. Bell, Raymond Irwin, J. B. Jameson, John H. Moore, C. Lynn Harris, Robert McCrary, William S. Orr, Payton Kolb, Henry Kirby, Morris Henry, A. S. Koenig, and C. C. Long; President John Wood, First Vice President Guy R. Farris, President-elect Ben N. Saltzman, Speaker Amail Chudy, Vice Speaker Charles Wilkins, Secretary Elvin Shuffield, and Treasurer Kenneth R. Duzan, Past Presidents T. Duel Brown, Joe Verser, C. R. Ellis, C. Lewis Hyatt, Joseph A. Norton, H. W. Thomas, Stanley Applegate, and Robert Watson.

The Chairman of the Credentials Committee, Purcell Smith, reported that a quorum was present.

Upon motion of Orr, the House approved minutes of the 97th Annual Session as published in the June 1973 issue of the Society Journal.

The minutes of the meeting of the House of

Delegates held November 25, 1973, were approved by motion of Wynne.

With Vice Speaker Charles Wilkins presiding, the following special guests were introduced:

Mr. Fred Heinemann, President, Arkansas Chapter, Student American Medical Association, and a member of the Junior Class of the Medical School

Mrs. Christina Jefferson and Mrs. Carol Chappell, representatives of the Senior Class of the University of Arkansas School of Medicine

Mrs. Ben H. Johnson, Jr., Bessemer, Alabama, Vice President for the Southern Region of the Woman's Auxiliary to the American Medical Association

Mrs. A. S. Koenig, President of the Woman's Auxiliary to the Arkansas Medical Society

Mrs. George Roberson, President-elect of the Woman's Auxiliary to the Arkansas Medical Society

The President of the Society, John Wood, addressed the House as follows:

ADDRESS OF THE PRESIDENT

John P. Wood

The year 1973-74 may well be called the year of awareness of PSRO. The Bennett Amendment to HR-1, passed in 1972, added the concept of peer review which the Senator had found attractive in the first two of three versions of the Medcredit Legislation which the AMA has put before Congress for its consideration.

Very shortly, one month later, at the Clinical Meeting AMA in Cincinnati, the Board of Trustees and Council on Medical Services presented the following report to the House. I quote:

"When the legislation was under consideration by the congress, the AMA questioned whether a government operated program of review geared in large part to cost control could be effective without reducing the quality of patient care. Notwithstanding this concern, since Public Law # 92-603 has been adopted, the Council on Medical Service and the Board of Trustees believe the AMA should provide a dominant role of leadership in the implementation of PSRO to insure that the best interests of the public, that is, your and my patients, and the best interests of the profession are preserved. Because of the far reaching effects of the legislation a National Advisory Commission was formed. This included

members from the Board of Trustees, Council on Medical Service, Council on Legislation, Council on Medical Education, membership from the House of Delegates, AMA, Intern and Resident Business Session. Also the interspecialty Council—the President of the ASIM, the President of the American College of Surgeons, Representation from the American Association of Foundation for Medical Care, ADA, American Hospital Association, The Nursing Home Association, Blue Cross-Blue Shield, The Health Insurance Association of America, The National Medical Association and some members at large. Task Forces were then created:

1. One on Rules
2. One on Structure and organization
3. One on the subject of geographic areas
4. One that created models and prototypes
5. One on guidelines of care
6. One on communication and education
7. One on data collection, processing and storage
8. One on the evaluation of the overall program

These task forces have worked hard and well and for the most part completed their work by the end of last year just prior to the Clinical Meeting at Anaheim. By the time of the meeting at Anaheim in December there was surfacing a strong undercurrent of unrest as more physicians became more acquainted with the provisions of PSRO. There was lengthy debate and all sides were heard.

I feel compelled to give you the AMA Board of Trustees' Council on Medical Services Report EE—a recommendation of the direction of AMA PSRO policy given at the AMA clinical meeting in Anaheim, California, in December, 1973. Briefly, it consisted of the following:

1. A summary of existing AMA policy.
2. A series of eight observations on current factors affecting AMA policy deliberations.
3. A list of four options open to the AMA.
4. The Board and Council's recommendation to the House.

The eight observations were:

1. Repeal is not currently politically viable.
2. Congress will consider amendment.
3. Non-participation would abrogate the physician responsibility and individual physicians cannot escape review of Medicare and Medicaid services.
4. Amendments to the law can improve it.
5. Areas for amendments are being identified.



1. Councilor W. Payton Kolb confers with Malcolm Todd, president-elect of AMA.
2. President John Wood greets Mrs. Malcolm Todd, wife of the president-elect of AMA.
3. The president-elect of the AMA, Malcolm Todd, attended the Tuesday meeting of the Council and discussed problems of organized medicine with the Society President John Wood.
4. The President of the Woman's Auxiliary, Mrs. A. S. Koenig, addressed the Sunday session of the House of Delegates.
5. Mrs. George Roberson (left) of Pine Bluff will serve as president of the Woman's Auxiliary for 1974-75 and Mrs. Curry Bradburn (right) of Little Rock will hold the position of president-elect.
6. The Past Presidents of the Woman's Auxiliary held their traditional breakfast meeting on Tuesday morning of the convention.

6. Amendments may be more effective than efforts to change regulations.
7. PSRO may cost more than it saves.
8. Repeal of PSRO would not eliminate cost control and review measures from Medicare and Medicaid.

The four options were:

1. To improve the law through regulations and administrative changes.
2. Seek amendments.
3. Promote repeal.
4. Suggest non-participation by Medical Societies.

The Council noted that there should be a "policy position by the House which would prevail so long as the law remained in force".

The following is the policy statement passed by the House of Delegates:

1. That the medical profession remains firmly committed to the principle of peer review, under professional direction, and
2. That medical society programs of proven effectiveness should not be dismantled by PSRO implementation, and
3. That the Association suggests that each hospital medical staff, working with the local medical society, continue to develop its own peer review, based upon principles of sound medical practice and documentable objective criteria, so as to certify that objective review of quality and utilization does take place; to make these review procedures sufficiently strong as to be unassailable by any outside party or parties; and that the local and state medical societies take all legal steps to resist the intrusion of any third party into the practice of medicine, and
4. That this House of Delegates, as individual physicians and through the Board of Trustees and its Council on Legislation, work to inform the public and legislators as to the potential deleterious effects of this law on the quality, confidentiality and cost of medical care; and the hope that the Congress in their wisdom will respond by either repeal, modification, or interpretation of rules which will protect the public.

The considered opinion of this House of Delegates is that the best interests of the American people, our patients, would be served by the repeal of the present PSRO legislation. It is also believed that this is consistent with our long-

standing policy and opposition to the legislation prior to passage.

The considered opinion of the Board of Trustees and the Council on Medical Service is to recommend to the House of Delegates that the AMA continue to exert its leadership and support constructive amendments to the PSRO law, coupled with continuation of the effort to develop appropriate rules and regulations."

In March the AMA Board of Trustees met and proposed nineteen amendments to PSRO, calling for repeal or deletions of sections of the law. Congress agreed to hearings this month on these matters. I'm sure Dr. Todd can bring us up to date on these hearings.

The Arkansas Foundation for Medical Care met following the Midwinter meeting in Little Rock last November, selected officers and voted to solicit HEW to implement PSRO in Arkansas rather than abrogate this function to a health agency or consumer organization. The task of complying with the present law remains, however, and there is much planning and work to be done by the Foundation members to meet the time-table of H.E.W.

The specter of the Kennedy-Mills NHI Bill has appeared on the national scene. We must continue to gain congressional support for our own Medigap Bill, having at present 180 sponsors. These two possible legislative actions alone make it urgent that every physician join and support ARK-PAC and AM-PAC. It is no idle coincidence that the doors of 180 legislators are open to organized medicine. This has been made possible by the PAC activities through your support.

In this past year Medicaid funds have become available for payment of drugs to Social Service recipients. A Drug Utilization Review Committee has been formed (of physicians and pharmacists) to review profiles for possible drug over-utilization and drug abuses. This committee, which includes eleven physicians, has functioned well.

Your executive committee has met monthly with Allan B. Cooper, Director of Medical Services of Arkansas Social Services and the Medical Director, Dr. Walter O'Neal, assisting Dr. O'Neal in reviewing cases of over-utilization in the Medicaid program. The liaison has been most excellent between the Society and the Social Services Department and we appreciate this co-operation very much.



7. Ben N. Saltzman of Mountain Home takes the oath of office of President of the Arkansas Medical Society from John P. Wood.
8. President John Wood served as Master of Ceremonies at the Inaugural Banquet on Tuesday evening.
9. Ben N. Saltzman presents a plaque expressing appreciation to the immediate past president, John Wood.
10. John Wood commends Mrs. Charles F. Wilkins, Jr., for her efforts on behalf of the AMA's Education and Research Foundation.
11. Dr. and Mrs. George Roberson of Pine Bluff and Dr. and Mrs. Malcolm Todd at the Inaugural Banquet on Tuesday.
12. Special guests at the Inaugural banquet were members of the President's family and his associate.

As a member of the Executive Committee of Arkansas R.M.P. I would like to give a progress report of that organization. In the past six months Federal funds that were allocated to the RMP's and impounded by actions of the President have been released and this has given new life to that program. Dr. C. W. Silverblatt, the medical director, resigned recently and our Society lost a staunch friend. Dr. Glen Baker is ably representing the Society as overall chairman of the R A G Committee and we are indebted to him for his interest in that service. I think it is incumbent upon us as physicians to take a more active role and interest as Board Members of not only Arkansas RMP, but CHP, Arkansas Health Systems Foundations, E.H.S.D.S., particularly in view of the considerable Federal funds available to these organizations from H.E.W. and the policy making role in new health care delivery methods that they now are able to generate in Arkansas. Two of these agencies have been headed by physician directors who have since resigned and it now appears that these positions will not be replaced with M.D.'s.

All of these agencies' roles are now clouded by proposed legislations, such as the Rogers Bill 12053 which would create a new Super Health Agency, combining all these agencies into a public utility-type regulatory commission with jurisdiction over all medical agencies and institutions and programs receiving Federal funds. Passage of such legislation would have far-reaching effects on medical care as we know it today in Arkansas.

During this last year Win Shorey resigned as Dean of the Medical Center. We will miss him greatly in that capacity. The search for a new Dean has been an exhaustive one—and for the first time has been participated in by many members of the Society and the Executive Committee. This has been most rewarding to us all and we express our appreciation to Jim Dennis for this privilege. Eight candidates were interviewed, all most capable, and last month three candidates' names were submitted to the University of Arkansas Board of Trustees for the final selection of a new Dean. These candidate interviews have brought a new awareness to the problems facing medical teaching institutions. It is my recommendation that further Town and Gown meetings be held to help solidify our support of our medical school.

The mandate of HEW proposing recertifica-

tion of all physicians in the near future makes it imperative that our medical school continue strong leadership in continuing medical education programs in Arkansas. It is a paradox that Federal assistance to our medical schools is diminishing when HEW apparently has unlimited funds for various health agencies. Since 1951 AMA-ERF has contributed \$25 million to the nations' 114 medical schools. I urge every physician in Arkansas to support our University of Arkansas Medical Center in every way possible. We cannot let this institution falter.

All eyes will focus on us May 1st as the discriminatory wage-price controls on physicians will have expired. We have fought long and hard for the removal of these controls; however, we must exercise self-restraint as far as increasing fees is concerned. If the present cost of medical care in this country is 100 billion dollars a 1% increase will be spoken of as an increase of one billion dollars in medical costs, not the possible small increase on your office fee that might be warranted. Opponents of organized medicine and infrequently politicians and proponents of Cradle to Grave N.H.I. and H.E.W. will utilize unrestrained cost increases to further solidify the cost control aspect of PSRO and increase the likelihood of passage of the Rogers Bill and make a National Health Insurance bill a quick reality.

Peer review is a reality here to stay. Cost control of some kind is here to stay. It must not mitigate good medical care. It is not enough to oppose—we must initiate a better plan.

No country in the world can boast of better medical care than the U.S.A. despite statements of some to the contrary. But as you can see the road ahead for organized medicine is rocky. We can stumble, we can falter. We have felt that we have been in this position before but we have had the courage to fight for our convictions as physicians and citizens. We have served the ill true to our oath; however, at this time of great uncertainty as to our future it behooves us all to search for unity of purpose—to lay aside past differences—we cannot afford divisiveness above all—to rededicate our efforts to improve medical care and to oppose with all our strength a bureaucracy that would force us into providing second-rate medical care. We must awaken to the realities of politics. We must become politically alive. Medicine needs to be unified and strong if it is to present its views with authority.



13. Members of the Fifty Year Club attended a breakfast meeting on Tuesday morning. Present were (front row, left to right) R. H. Whitehead, J. W. Morris, G. Allen Robinson, D. W. Goldstein, Ross Van Pelt (back row, left to right) C. W. Jones, Sr., D. L. Owens, Mac McLendon, and L. D. Massey.
14. The Society hosted a luncheon on Monday for senior students at the University of Arkansas School of Medicine. Society officers and designated councilor district representatives served as hosts for the luncheon.
15. George Mitchell, Vice President for Medicare and Medical Services of Blue Cross-Blue Shield, addressed the House on Sunday.
16. Malcolm Todd, of Long Beach, California, president-elect of the American Medical Association, at a press conference on Tuesday morning.
17. Past Presidents of the Society gathered for a breakfast on Wednesday morning. Present were Robert Watson, Ross Fowler, C. Lewis Hyatt, Stanley Applegate, Joe Norton, H. W. Thomas, John Wood, C. R. Ellis, and T. Duel Brown.
18. Participating in the program for the first prayer breakfast held in conjunction with the Annual Session were Jerome Levy, Ralph L. Byron, Joseph A. Norton, Eugene Taylor, Robert White, John Wood, Ben Saltzman, and Amail Chudy.

As a united working Society we can be heard. I challenge you toward that goal!

The following report from Arkansas Blue Cross-Blue Shield was presented to the House by George K. Mitchell, Vice President for Medicare and Medical Services:

REPORT FROM ARKANSAS BLUE CROSS-BLUE SHIELD

Mr. Speaker, Dr. Wood, Officers and Members of the Society, and guests:

We very much appreciate being given the opportunity to give you a report from Arkansas Blue Cross and Blue Shield. Because of an unavoidable conflict, our president, Mr. Robert Taylor, regrettably is unable to attend the annual session this year. He does send his apologies and looks forward to participating in future meetings.

Copies of our annual report are available either through our Professional Relations Representatives or from the Plan officers. Therefore, my presentation will not include any discussion on overall operations. Instead, my report to you will be brief and will concentrate on our activities which primarily relate to Professional Relations. In this regard, I take pleasure in introducing Dr. Bob Benafield who joined Arkansas Blue Cross-Blue Shield in November of 1973 as our Medical Director. It is significant that Bob has not only done an outstanding job thus far as Medical Director but will have broader responsibilities in Professional Relations beginning May 6, 1974. We have reorganized our Professional Relations activities and now have two divisions—one relating to hospitals and managed by Mr. John Chisholm, a hospital administrator; and another relating to the medical profession which will be headed by Dr. Benafield. This will not only specialize but will concentrate our efforts towards better communication and service to the medical profession. Dr. Benafield's staff will consist of a field representative supervisor, Mr. Bob Huey, and four field representatives—Margaret Jolly, Sam Holliday, Duane McMasters and Hank Shiell. In addition, our WATS line representatives will be directly responsible to this new Professional Relations Division. Our WATS line representatives are Nancy Mauney and Andy Anderson.

The Professional Relations Division will consider and hopefully complete three major projects during the twelve-month period beginning July 1. First, we plan to have nine regional

meetings around the State for your medical assistants and office personnel. The plans call for meetings to be held twice yearly and the format will consist of a luncheon and a seminar on Thursday afternoons. In addition to the Professional Relations representative, the participants in these seminars will be management people representing all of our claims divisions. We feel that these meetings will not only be constructive for your experienced office people, but will also be of value to your new employees as they deal with the various programs which we handle. I think it is safe to say that one of the best ways to develop and maintain good relationships with physicians is to give whatever services are necessary to support the work of your office personnel through clear, accurate, and consistent communications. These meetings will consider topics which are primarily of interest to your people and will hopefully be problem solving.

Second, Dr. Benafield and I feel that there is a great need to provide interns and residents who are planning to enter private practice with practical clear-cut information on the varied steps which are necessary to establish an office practice. Dr. Benafield plans to hold a series of luncheon meetings for all interested house staff. Already these young physicians have been given a cassette tape on this subject developed by the American Medical Association. More importantly, we have engaged the services of a recognized management consultant who has been working in Arkansas for a number of years who will give a series of lectures and hold discussion periods on the key factors which are necessary to organize the business-end of practicing medicine. In our opinion, this sort of instruction and contact is a key part of medical education which has not been given proper attention.

Third, it appears that there is a good possibility that the various arms of the medical profession, Blue Cross and Blue Shield, the commercial carriers, Medicare and CHAMPUS have finally come to terms on a uniform claim form which could be used for billing all programs and all third parties. As you know, this is long overdue and we are hoping that some practical steps can be taken to adopt such a claim form after January 1, 1975. I would not want to assure you that this will take place on any specific date since approval by Medicare, and more particularly CHAMPUS, may be an in-

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19. Malcolm Todd, former Chairman of the AMA Council on Health Manpower, participated in the Physician's Assistants-Nurse Practitioner panel on Tuesday morning.
20. Vice Speaker Charles F. Wilkins, Jr., presides for a portion of the House session on Sunday.
21. G. Thomas Jansen of Little Rock, Chairman of the Program Committee, moderated the panel on Physician's Assistants on Tuesday. Panel members were Joe Verser, Nursing School Dean Elois Field, Malcolm Todd, and Mr. Eugene Warren, Legal Counsel.
22. Vice President Asa Crow presided at a scientific session of the annual meeting.
23. Mr. Eugene Warren, Legal Counsel, was one of the participants in the "Abortion" panel on Monday morning. Other panel members were Aubry Talley, Tony Council, and J. F. Hulka. Vice President Guy Farris presided at the session.
24. Headquarters staff personnel handling convention registration were Peggie Branham, Pat Andrews, Dorothy Thompson, and Becky Bautts.

volved procedure, but I am optimistic that this improved billing statement will be available to all of us. Many of you may have already seen the proposed form. It is similar to the Medicare claim form in both format and content. Along with the adoption of a uniform claim form, we are developing a request to Medicare and CHAMPUS to adopt the procedure code system developed by the American Medical Association called Current Procedural Terminology. We have been prohibited by Medicare from adopting any new procedure code system thus far, but we now feel that we can give a rational request since this new code system is most expressive of what doctors actually do and, of equal importance, the code system will be reviewed and updated on a regular basis by the various committees of the American Medical Association. The conversion to a new procedure code system by Arkansas Blue Cross and Blue Shield for all its programs will be costly, in the neighborhood of \$350,000, but we feel that such a move will be to everyone's long-term benefit. Coincident with these proposed improvements, we also are hoping to get approval to allow physicians to submit claims showing procedure code only. It is our position that this will be a great advantage to all of us. We would still ask the 75 or 80 physicians in the State who account for 90% of our utilization problems to use both the procedure code and nomenclature. We will keep the Society informed as to our progress in these areas.

Lastly, I want to speak on the action which was taken by this House of Delegates two years ago on the matter of a statewide locality for recognizing usual, customary and reasonable charges. As you remember, your action called for our trying to gain approval from Medicare to abolish the current five localities and establish a one locality concept for the State according to field of practice. Arkansas Blue Cross and Blue Shield presented a very detailed proposal to Medicare which contained what we felt was adequate rationale for making such a change. We have since reported to the Society office that our request was rejected. You were informed of these events through the Arkansas Medical Society newsletter and many of you have sent our Congressional delegation a notice as to your feelings on this matter. I hope that this matter is not closed. I have recently been informed that Senator McClellan is trying to arrange a meeting on this subject with HEW officials

which will be attended by representatives of the Medical Society and Arkansas Blue Cross and Blue Shield.

It is my wish that we will be able to give this House of Delegates a report from Arkansas Blue Cross and Blue Shield each year which will address those topics which are of interest to you and members of the Society. We are making a concerted effort to establish and maintain meaningful, and I emphasize the word meaningful, Professional Relations and service. We very much value your interest and support but we also value your criticisms. Exposing ourselves to professional critique should not only give us an opportunity to clarify misunderstandings but many times reveal justifiable complaints on which we may be able to take some positive action. On behalf of our Board of Trustees and the officers and staff of Arkansas Blue Cross and Blue Shield, I thank you again for the opportunity to present this report.

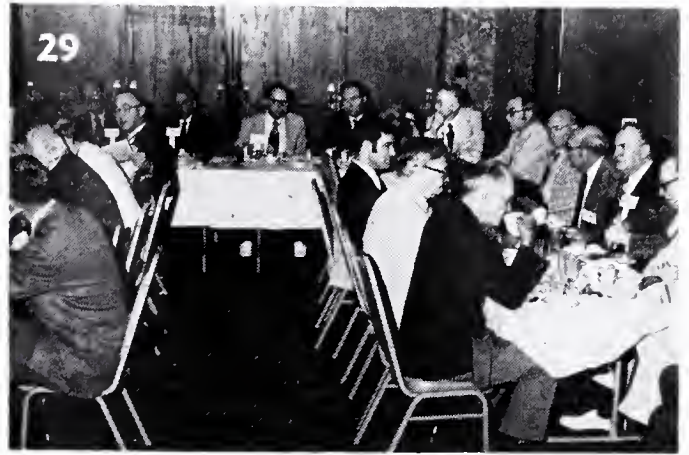
The following committee report was received by the House and referred to Reference Committee Number Two:

REPORT OF THE COMMITTEE ON MEDICAL LEGISLATION

H. Elvin Shuffield, Chairman

Mr. Speaker, Officers, Members of the House of Delegates, and Members: This being a so-called "off-year", the Legislative Committee has been relatively inactive, yet we have been held in suspense as to whether or not we are going to have a special session. As you know, we have not had one to date, but the situation appears that we will probably have one after the major political races are over.

Mentioning the political races, it is of utmost importance that all of you take a very active part in the United States Senator's race, Governor's race, and Lieutenant Governor's race (because it must be remembered that the Lieutenant Governor presides over the Senate and he is in a position to make assignment of the new bills to the various committees; sometimes this assignment will determine the ultimate outcome of legislation). Also, I would like to bring to this House's attention the fact that there are five Arkansas Senate races this year and all of these are very important positions and I would like for you to take a very active part to try and get good men elected in all of these positions. If anyone is interested in these races, we have a list



25. The newly-elected president-elect is escorted to the podium by John Kirkley and H. W. Thomas.
26. T. E. Townsend accepts office of president-elect of the Society at the Wednesday session of the House of Delegates.
27. Members of the House of Delegates in session on Sunday hear reports on various subjects affecting the practice of medicine.
28. T. E. Townsend of Pine Bluff is congratulated following his election to the office of president-elect.
29. The Council of the Society met daily during the Annual Session to consider the various items of business before the Society. This photo was taken at the Tuesday morning meeting. C. C. Long is Chairman of the Council.
30. The presidents of the Society and the Auxiliary for 1974-75, Ben N. Saltzman of Mountain Home and Mrs. George Roberson of Pine Bluff.

here on the table if you want to look at them. There are eighteen House seats to be filled in this election and, incidentally, we have only less than four weeks until the election since things have been moved up this year. There are eighteen House seats to be filled and we have lost a lot of good friends in the House, some of them being real deep thinkers and stable individuals who have decided not to run for reelection. Therefore, it is very important that we try to pick good men for these vacancies. I might mention that Dr. Morriss Henry, one of our State Senators, did not get an opponent this year. Also, I would like to mention that Dr. Don Toon, he is in District 62 in Ashley County, is a candidate for the House of Representatives. Dr. Toon, would you please stand? As you know, we do not have an MD in the House; there is one chiropractor, three optometrists, and another optometrist running, so we need an MD in there.

Now, for matters which need to be brought to your attention. I don't think we need to take any special action at this time, but I would like for you to be thinking about this and in December when we have our legislative session, we will need to make a decision on these things. Apparently, we are going to have to make some kind of a stand on licensing or relicensing or certification and recertification legislation because in some of the states the politicians are trying to pass and have passed such legislation and quite often what is passed is not for the best interest of the people or the doctors. So give this some deep thought.

I would like to bring to your attention that the Kennedy-Mills bill provides for certification and recertification; unfortunately, the wording does not spell out any details and I am greatly concerned that these two matters will be left to some lay person in Baltimore to make some administrative decision on it and this could be very difficult to comply with and sometimes would not be for the best interest of our people.

Also, the United States Supreme Court has declared laws similar to Arkansas' Abortion Law to be unconstitutional so new legislation will have to be enacted pertaining to a second and third trimester of pregnancy. So give this some deep thought, go home and try to get out a good vote for good men and let's see if we can improve the situation a little.

Speaker Chudy expressed appreciation to Dr.

Shuffield for his tireless legislative efforts and he was accorded a round of applause by the House.

The House gave final approval to the following amendments to the Constitution:

CHAPTER VII. Delete present Section 2:

"Each councilor shall be organizer, peace-maker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall be prepared to make an annual written report of his work, and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such councilor in the line of the duties herein imposed may be allowed on a properly itemized statement; but this not be construed to include his expenses in attending the annual session of the Society."

Substitute the following four paragraphs:

1. Each councilor shall be organizer, peace-maker and censor for his district. The two councilors in each district shall be designated "senior" and "junior" on the basis of length of tenure.
2. A meeting of the members in each councilor district shall be called by the councilor at least once each year within two months of the Annual Session for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for informing, improving, and increasing the knowledge and zeal of the component societies and their members.
3. The councilors shall jointly prepare and submit to the Council prior to the Annual Session a written report of their work and of the condition of the profession within their district.
4. The necessary traveling expenses incurred by each councilor in the line of the duties herein imposed may be allowed on submission of a properly itemized statement.

CHAPTER VI. Add to the present Section 3 so that it will read:

Section 3. The vice president shall assist the president in the discharge of his duties. In



Members of the Executive Committee and their wives formed a receiving line for the Council reception on Sunday evening. Many of the members of the Society attended.

the event of the president's inability to serve, the first vice president shall serve in his stead.

The vice presidents may be assigned by the President of the Society as ex-officio members of certain committees of the Society. The vice presidents' responsibilities will be to stimulate, to guide, to maintain liaison, and to otherwise assist the assigned committees and their respective chairmen in the performance of their activities. In no instance will the Vice President usurp or supplant the committee chairman in his responsibilities. The Vice President shall not have a vote in the affairs of the committees to which he is assigned under provisions of this section.

ARTICLE III. Component Societies

Amend this article so that it will read:

Component societies shall consist of those county medical societies which hold charters from this society; provided, however, that there may be a chartered society known as the 'Student, Intern and Resident Society' as provided in the by-laws.

ARTICLE IV. Active Membership, Section 2

Amend this section so that it will read:

Section 2. Active Membership

The active membership of this Society shall comprise all the active members of its component societies. Only such person is eligible for active membership in a component society as possesses the degree Doctor of Medicine and holds an unrevoked license to practice medicine and surgery by the Board of Medical Examiners which consists of members recommended by this Society. The eligibility requirements set forth in the preceding sentences are not to apply, however, to members in good standing in any component society at the time of the adoption of this Section (Adopted, House of Delegates, 1937 Annual Session) nor to the members of the specially-chartered "Student, Intern, and Resident Society".

ARTICLE V. House of Delegates, add to the Article so that it will read as follows:

The House of Delegates shall be the legislative body of the Society, and shall consist of (1) delegates elected by the component county societies; (2) the councilors, and (3) ex-officio, the president, first vice president, president-elect, speaker, vice speaker, secretary, treasurer, and past presidents of the Society, provided, however, that the ex-officio members shall have

the power of voting on all subjects except the election of officers, and (4) one delegate from the "Student, Intern and Resident Society".

CHAPTER I. Section 6.

Delete the following:

Affiliate Membership for Interns and Residents. An annual affiliate membership shall be granted interns and residents, provided they are fully or partially excused from the payment of county society dues, and provided the request for exemption is transmitted through a component society of the Arkansas Medical Society. The requirement for active membership prior to exemption shall be waived for such affiliate members. This type of member shall be accorded full privileges except that he may not vote or hold office, and he shall receive the Journal of the Arkansas Medical Society.

and substitute the following new Section 6:

Section 6. Special Membership for Students, Interns and Residents

- (1) An annual special membership shall be granted to bona-fide students of medicine at the University of Arkansas School of Medicine to Interns and Residents within the State of Arkansas who are physicians, provided that they are fully or partially excused from the payment of county society dues, not to exceed ten percent of the dues charged active members of the Society, and provided that the request for exemption is transmitted through a component society of the Arkansas Medical Society. The requirement for active membership prior to exemption shall be waived for such special members.
- (2) The special members resulting from this section will comprise a single component group of the State Society similar to a county society, shall have privileges of speech, may serve on committees, will receive the Journal of the Arkansas Medical Society and shall be entitled to one voting representative in the House of Delegates.

Speaker Chudy called the attention of members of the House to four resolutions dealing with repeal of the Professional Standards Review Organization legislation. The resolutions—from Union, Miller, Jefferson and Pulaski counties—were all referred to Reference Committee Number Three.



Arkansas Blue Cross-Blue Shield hosted a party for members of the Society on Monday evening. Among those representing Blue Cross-Blue Shield were Vice President H. T. Gardner, Medical Director Bob Benafield, M.D., and Vice President for Medicare and Medical Services, George Mitchell, M.D. Members of the Society enjoyed the lighter moments of the convention.

Speaker Chudy announced vacancies occurring in the Second and Fourth Congressional District positions on the Arkansas State Board of Health and in the member-at-large position on the Arkansas State Medical Board.

Speaker Chudy gave special recognition to members of the Greene-Clay County Medical Society and its officers—Larry Lawson, president, and George Collier, secretary—for the highest percentage participation in ArkPac of a component society. Speaker Chudy also recognized

Jim Lytle of Batesville, Ark-Pac's only "Sustaining Member" for 1974.

Meetings were held on the floor to select district representatives to the Nominating Committee. Selected were (1) Joe Verser, (2) Jim Lytle, (3) N. C. David, (4) Raymond Irwin, (5) Charles Weber, (6) Lynn Harris, (7) Clyde Paulk, (8) Curry Bradburn, (9) Mahlon Maris, and (10) Ken Lilly.

The first meeting of the House ended at 2:45 P.M.



SCIENTIFIC SESSIONS

The First General Session of the 98th Annual Session of the Arkansas Medical Society opened on Monday, April 29, 1974, with First Vice President Guy R. Farris presiding. The opening program was a seminar on Abortion. Mr. Eugene Warren, Legal Counsel for the Arkansas Medical Society and the Arkansas State Medical Board, discussed the subject from the legal viewpoint. "Saline Abortion" was discussed by H. Aubry Talley and R. Tony Council spoke on "Suction Curettage". J. F. Hulka of the University of North Carolina School of Medicine presented a paper on "Complications".

Other subjects covered by morning lectures were "Total Knee Replacement" by Carl L. Neslon of Cleveland and "Evaluation of Scrotal Masses" by Paul C. Peters of the University of Texas Southwestern Medical School.

Donald L. Duncan, Second Vice President, presided at the scientific session on Monday afternoon. The session opened with "The Use of Newer Antibiotics in Pediatric Practice, Comparative Assessments" by Heinz F. Eichenwald of the University of Texas Health Science Center at Dallas. John McCrary of the University of Texas Medical Branch at Galveston spoke on "Thyroid Eye Disease Pearls". "Radiological Manifestations of Diabetes Mellitus" was presented by Byron G. Brogdon of the University of New Mexico School of Medicine. Reuben B. Widmer of the University of Iowa College of Medicine discussed "Problem Oriented Medical Records". The final lecture on the afternoon program was "Sterilization by Laparoscopy", by J. F. Hulka of North Carolina.

The Third Vice President of the Society, Asa Crow, presided at the final general session of the convention on Tuesday morning, April 30th. A seminar on "Physician's Assistants-Nurse Practitioners in Arkansas" was moderated by G. Thomas Jansen of Little Rock. The seminar

panel included Mr. Eugene R. Warren, Legal Counsel for the Arkansas State Medical Board; Malcolm C. Todd, Long Beach, California, president-elect of the American Medical Association; Elois Field, Dean of the School of Nursing at the University of Arkansas Medical Center and Joe Verser, Secretary of the Arkansas State Medical Board. The seminar was followed by a lecture on "Surgical Treatment for Meniere's Disease" by Milos Basek of Columbia Presbyterian Medical Center in New York.

SPECIALTY GROUPS AND RELATED MEETINGS ALLERGY SOCIETY

The Alan Cazort Allergy Society met for luncheon and a business session on Monday, April 29th.

TUMOR CLINIC

The Association of Tumor Clinic Staff Members in Arkansas held its annual luncheon meeting and Cancer Seminar on Monday, April 29th, with W. Ducote Haynes of Little Rock as speaker.

EYE, EAR, NOSE AND THROAT SECTIONS

The Eye Section held a morning scientific session on Tuesday with John McCrary of Galveston and Philip Ellis of Denver as guest speakers. After lunch, the Section met in the Eye Clinic of the University of Arkansas Medical Center for examination of patients and discussion.

The ENT Section met Tuesday afternoon for a program session with Milos Basek of New York as guest speaker.

A joint luncheon meeting of the Eye, Ear, Nose and Throat Section was held at noon. Robert P. Hughes of Fort Smith was elected

chairman of the Eye Section and James L. Smith of Little Rock was re-elected secretary. A. J. Brizzolara of Little Rock will serve as chairman of the ENT Section for the next year and Tom Smith of Little Rock is secretary of that group.

PATHOLOGY

The Arkansas Society of Pathologists held a luncheon business meeting on Tuesday, April 30th.

ORTHOPAEDICS

The Arkansas Orthopaedic Society held a luncheon meeting on Tuesday. A scientific program was presented by Carl L. Nelson of Cleveland, who has been named Professor and Chairman of the Department of Orthopaedics at the University of Arkansas School of Medicine.

PEDIATRICS

The Arkansas Chapter of the American Academy of Pediatrics met for luncheon on Tuesday, followed by a business session and scientific program. Speakers included W. T. Kniker, Heinz F. Eichenwald and Robert Merrill.

Betty Ann Lowe of Texarkana was elected Chairman of the Chapter and Doane Newton was named program chairman.

RADIOLOGY

The Arkansas Chapter of the American College of Radiology held a luncheon meeting on Tuesday with Byron G. Brogdon of Albuquerque as guest speaker. Neil E. Crow of Fort Smith was elected President of the Chapter and William R. Seibold, Jr., of Texarkana was elected Secretary.

FAMILY PRACTICE

The Arkansas Academy of Family Physicians met on Tuesday for a program presented by Reuben B. Widmer of Iowa City. A Board meeting followed the scientific program. Mrs. Alta Jean Good is the new executive secretary of the Academy. Her mailing address is Post Office Box 5721, Brady Station, Little Rock, Arkansas 72205.

NEUROSURGERY

Neurosurgeons of the State met on Tuesday afternoon for the purpose of organizing as a section of the Society for scientific purposes.

INTERNAL MEDICINE

The Arkansas Society of Internal Medicine held a luncheon meeting on Tuesday for a program on "Socio-economic Aspects of the Practice of Internal Medicine". Dr. James D. Wilson of Little Rock is currently serving as president of the ASIM; McDonald Poe of Fort Smith will take office as president in July 1974.

ANESTHESIOLOGY

The Arkansas State Anesthesiology Society met on Tuesday for a program on "Continuous Positive Airway Pressure" with Warren E. Ahlgren of Dallas as guest speaker.

R. C. Goodman of Fort Smith is president of the Society.

DERMATOLOGY

The Arkansas Dermatologic Society met for a business session on Sunday afternoon, April 28th.





President Ben N. Saltzman and President-elect T. E. Townsend.



The Society Executive Committee—Elvin Shuffield, Secretary; Ben N. Saltzman, President; President-elect T. E. Townsend; and C. C. Long, Chairman of the Council.



The Council of the Society for 1974-75. Present for the photograph May 1, 1974, were (front, left to right) Speaker Amail Chudy, Councilors Henry Kirby and Paul Gray, Treasurer K. R. Duzan, President Ben N. Saltzman, President-elect T. E. Townsend, Council Chairman C. C. Long, Secretary Elvin Shuffield, Councilors Lynn Harris, Morriss Henry, John Moore; (back row, left to right) Vice Speaker Charles F. Wilkins, Jr.; Councilors L. J. Pat Bell, John P. Burge, John E. Bell, Robert McCrary, Eldon Fairley, William S. Orr, Jr., Raymond Irwin, W. Payton Kolb, A. S. Koenig, and John B. Kirkley.

OTHER ACTIVITIES

COUNCIL RECEPTION

The Council of the Society hosted a reception on Sunday evening for all members of the Society and their guests. A "Knights of Armor" theme was used in the decorations. Members of the Executive Committee and their wives formed a receiving line. Many of the members of the Society were present.

BLUE CROSS-BLUE SHIELD PARTY

On Monday evening, Arkansas Blue Cross-Blue Shield hosted a cocktail buffet for the members of the Society. A large crowd enjoyed the hospitality of Blue Cross-Blue Shield and the Society is indebted to them for a very nice party.

GOLF TOURNAMENT

Members of the Society participated in a golf tournament at the Little Rock Country Club on Monday and Tuesday of the Convention. The Low Gross winner was Johnson Baker of Little Rock; Low net was won by Mack Moore of Little Rock; Grimsley Graham was low net runner-up and high gross was by Willie Harris of England. A total of \$125 in merchandise was awarded to the winners. The prize money was covered by the tournament registration fee and no solicitations were made for prizes. Blue Cross-Blue Shield donated a pen and pencil set for the winner and the Tournament Committee expresses its thanks to Blue Cross-Blue Shield.

MEDICAL STUDENT LUNCH

The Society hosted a luncheon on Monday for all of the senior students at the University of Arkansas School of Medicine. Officers and designated representatives from each councilor district served as hosts. There was no program, just informal discussion of the Society's activities and the need for participation of all physicians.

PRAYER BREAKFAST

The Society's Committee on Medicine and Religion sponsored the first annual Prayer Breakfast on Monday morning of the Convention. Ralph L. Byron of Duarte, California, was the featured speaker. Joe Norton of Little Rock served as master of ceremonies for the breakfast. John P. Wood gave the invocation. Amail Chudy and Jerome Levy read passages from the Bible. Robert White was soloist and was accompanied

by Eugene Taylor. Benediction was by Ben N. Saltzman.

Carl E. Wenger coordinated the breakfast on behalf of the Medicine and Religion Committee.

JUNIOR BRANCH, AMERICAN MEDICAL WOMEN'S ASSOCIATION

The Junior Branch of the American Medical Women's Association held a breakfast meeting on Tuesday morning. All women medical students and women physicians in the State were invited.

FIFTY YEAR CLUB

The Fifty Year Club of the Arkansas Medical Society held a breakfast meeting on Tuesday morning in the Camelot Inn. The Club Secretary, G. Allen Robinson of Harrison, presented the program, "A Tribute to Paul Dudley White".

Oliver A. Smith of Hot Springs was elected President of the Club for the next year and Dr. Robinson was re-elected secretary.

THE FIFTY YEAR MEDICAL CLUB OF ARKANSAS PAYS TRIBUTE TO THE LATE DOCTOR PAUL DUDLEY WHITE

Paul Dudley White, the gentle physician, is saluted for his efforts of fifty years to bring together men and nations to prevent heart disease and war. Born June 6, 1886, the son of a general practitioner in Boston, Massachusetts, Paul Dudley White received his M.D. degree from Harvard University in 1911. While an intern in Massachusetts General Hospital, Dr. White was sent to England to purchase an Electrocardiograph. While there he studied its operation under the famous specialist Sir Thomas Lewis. On his return he took over the children and adult heart clinics at the hospital. Between 1914 and 1931 he made 21,160 cardiograms and with thousands of case histories the first edition of his great book HEART DISEASE appeared in 1931. He wrote:

"The need of a clear, concise and comprehensive presentation of the diagnosis and treatment of heart disease in the light of our present knowledge has caused me to write this book."

Twenty years later the fourth and final edition was published. Dr. Paul Dudley White founded the American Heart Association and authored

nearly 600 papers on heart disease. He said:

"The joy of the practice of medicine lies not only in service to others and in the intellectual pleasure of the work, but also in the realization that we are still but pioneers."

Dr. White served as a Medical Officer in both British and American Expeditionary Forces in World War I and in a post war Red Cross assignment in Greece. He was awarded the Legion of Honor by France in 1919.

Dr. White promoted exercise for preventing heart disease and rehabilitation from the effects. He personally set the pace by vigorous walking and riding the bicycle, which became his symbol. He contended that it was ridiculous for a person to quit exercise after the age of 40. Indeed he was certain that many of those who did abstain thus contributed to quicker hardening and fattening of the arteries. His maxim was "Death from a heart attack before the age of 80 is not God's will, it is man's will." He stressed daily programmed exercise, not bursts of summer tennis or weekend jogging.

"Every surviving victim of coronary disease today is indebted to him." Doctor Thomas W. Mattingly of Washington, D. C., also said "No other physician in America could have gained their complete confidence in the early days of President Eisenhower's illness, as Dr. White did in convincing the Nation that a President, recovering from a heart attack, could return to the stressful job of the Presidency."

In 1970 Paul White was nominated for the Nobel Peace prize. In 1971 he became one of the first Americans to visit the mainland of China.

Paul Dudley White passed away October 31, 1973, with his wife, Ina, age 78 at his bedside. The cause of his death a cerebral vascular episode. His full life of 87 years, 5 months and 25 days is proof that the good men do can indeed live after them. Dr. Paul Dudley White accelerated the fight against heart disease and strengthened the fragile cement among peoples.

PAST PRESIDENT'S BREAKFAST

The physicians who have served as president of the Arkansas Medical Society were honored with a breakfast hosted by the Society on Wednesday morning. Present were John Wood, Robert Watson, Stanley Applegate, Ross Fowler, Joe Norton, C. Lewis Hyatt, H. W. Thomas, C. R. Ellis, and T. Duel Brown.

ARKANSAS SOCIETY OF CLINICAL HYPNOSIS

The Arkansas Society of Clinical Hypnosis held its annual banquet during the Society's convention. The group met on Monday evening at the Sam Peck Hotel with Vladimir Benson, Vice President of the American Society of Clinical Hypnosis, as guest speaker. Raymond Biondo of North Little Rock is President of the Arkansas Society.

PRESIDENT'S INAUGURAL BANQUET

The President's banquet was held on Tuesday evening in the Golden Knight room of the Camelot. The Society President, John P. Wood, served as Master of Ceremonies.

Invocation was by Past President Joseph Norton.

President Wood introduced those seated at the head table as follows: Dr. G. Thomas Jansen of Little Rock, Chairman of the Convention Arrangements Committee, and Mrs. Jansen; Malcolm Todd of Long Beach, California, president-elect of the American Medical Association, and Mrs. Todd; Mrs. Wood; Dr. Ben N. Saltzman of Mountain Home, president-elect of the Society and Mrs. Saltzman; Elvin Shuffield of Little Rock, secretary of the Society, and Mrs. Shuffield; and C. C. Long of Ozark, Chairman of the Council of the Society, and Mrs. Long.

Other special guests present who were introduced by President Wood were: Mrs. George Roberson, President of the Woman's Auxiliary to the Arkansas Medical Society; Mrs. A. S. Koenig, Immediate Past President of the Woman's Auxiliary to the Arkansas Medical Society; Roger Busfield, Ph.D., Executive Director of the Arkansas Hospital Association, Mr. Robert Bruce of International Travel Advisors, and Mr. Frederick N. André, Field Service Representative of the American Medical Association.

President Wood expressed thanks to Arkansas Blue Cross-Blue Shield for the party hosted for Society members on Monday evening and expressed regret that the President of Blue Cross-Blue Shield was unable to attend the banquet.

Dr. Wood presented a check for \$10,179.50 to Winston K. Shorey, Dean of the University of Arkansas School of Medicine, from the American Medical Association's Education and Research Foundation. In presenting the check to Dr. Shorey, Dr. Wood gave special recognition to the Woman's Auxiliary to the Arkansas Medical Society for their efforts in behalf of AMA-ERF.

He expressed thanks to Mrs. Paul Cornell, the Auxiliary AMA-ERF Chairman, and to Mrs. Charles F. Wilkins, Jr., for her work in Pope-Yell County for AMA-ERF.

Past Presidents of the Society were introduced by President Wood. Past presidents in attendance were Robert Watson, Stanley Applegate, Ross Fowler, H. W. Thomas, Joseph Norton, C. Lewis Hyatt, Joe Verser, and T. Duel Brown.

Dr. Wood then administered the oath of office of President of the Arkansas Medical Society to Ben N. Saltzman of Mountain Home and presented the gavel to him.

As his first official duty, Dr. Saltzman presented a plaque of appreciation to Dr. Wood for his services to the State and to the profession during his term as Society president.

Dr. Saltzman made the following acceptance speech:

THE YEAR AHEAD

Ben N. Saltzman

After twenty-eight years of continuous attendance at Arkansas Medical Society annual meetings, I find myself at this podium, slightly apprehensive and extremely proud. I follow in the footsteps of men I have respected and admired over the years. These men have been devoted to the principles of American Medicine and the service of the people of our State.

I came to Arkansas a stranger, and you took me in. You gave me the opportunity to participate in your committee activities. You honored me by electing me a vice-president many years ago and more recently you trusted me to serve as Treasurer of the Society and member of the Council. It has been a labor of love, for it has enabled me to serve with many capable men in my chosen profession in an endeavor to improve the practice of medicine and provide better health care for all. I have also served on the county level as president and for the past twenty-three years as secretary of the Baxter County Medical Society. Believe me, I know the problems from the ground up.

My activities in the Arkansas Medical Society have provided opportunities for service in many allied fields, through voluntary health activities, public health activities and through representation on advisory councils relating to other health activities. In addition I served on the Council on Rural Health of the American Medical Association for a period of ten years. In this manner,

I have gained insight into the workings of a great volunteer organization that has done more to protect the health and health care of the people of this country than any other organization in the world.

Let's take it from the top. There has been considerable criticism of the AMA over the years. Most of it has been unwarranted. The AMA is you, its members. You are ably represented by your own elected delegates who have your interests at heart. Your interests are their interests. No major activity pursued by the AMA is initiated without first gaining the approval of your elected Board of Trustees and then your delegates. This is democratic and this is just. One often hears the implied criticism, "What has the AMA done for me?" For more years than I care to remember, the AMA has held the line against federal encroachment. Political pressures have caused some changes to be made, but basically there still is no direct interference with your relationship to your patients. Organized reaction on the part of the AMA has prevented runaway legislation that would be harmful to the profession and to the health care of our patients. The most recent evidence of this reaction is shown in the modification of the Kennedy-Mills Health Insurance bill. As long as we have a voice in the health care of our nation through the organized effort of the AMA, there will be no wild-eyed schemes enacted that will bring health care down to the levels exhibited in other countries.

Today, we find ourselves confronted with health planning agencies that seem to meddle in affairs that have been our prerogatives in the past. Actually, on examination, there is no real interference in the practice of medicine. These organizations deal with matters with which we ourselves have not dealt in the past. We have been too busy looking after sick people to worry much about preventive matters. Organizations such as Comprehensive Health Planning, Area-wide Health Planning and the Regional Medical Program are asking for our help. They need the input of the physicians. If we do not provide this, it will become necessary for them to exist without us. If this happens we can blame no one but ourselves if things don't work out the way we think they should. I have served on Federal Health Councils and Committees and though I have doubted the motives of the poli-

ticians who have introduced new health plans, I have never questioned the genuine interest and dedication of the people employed to implement these plans.

In the field of public health, we find ourselves supportive of programs that benefit our people. In our state, we have a fine health department that has taken the leadership in our country in promoting immunization programs, home health services, consumer education and a spirit of cooperation with our practicing physicians. It is my feeling that all health planning and all health services should be coordinated by the health department rather than by the large number of fragmented agencies.

The nursing profession is actively engaged in an upgrading program which will provide more well trained nurses capable of performing in the various specialties, in intensive care facilities and as practitioners in areas inaccessible to the practicing physician. The nursing profession too, seeks our help. We can provide guidelines. We need not condone encroachment. Working together, we can set limits. Working together just makes good sense. It's time we tried it.

Our voluntary health agencies need our support. They are in an excellent position to help provide education for the laymen and professional alike. They can provide partial or total funding for various health endeavors as needs arise. They represent people rather than governmental agencies and they are our best public relations cadre because we work toward the same end; namely, better health for more people. We are participating in support of the Uterine Cancer Task Force program of the Arkansas Division of the American Cancer Society. The Chairman of the Cancer Committee, Dr. Charles Henry needs our support to involve all the physicians in the State. If we work at it, we can eliminate deaths from uterine cancer. It is simply a matter of cooperation on our part.

The Arkansas Heart Association is promoting a blood pressure control program. Many of our physicians serve on the state and local boards of the Heart Association. We can make this an effective program.

The Arkansas Lung Association has long supported education in respiratory disease at the Medical Center. It has provided seminars in respiratory disease over the State. It has long

served the people of this State. It too needs our involvement.

In recent years I have become very much involved in the problems of Mental Retardation. I have learned that the practicing physician has generally held himself aloof from gaining knowledge and experience in a phenomenon that affects three percent of our population. The Arkansas Association for Retarded Citizens is working hard to interest both the lay and professional populations in the problem. It is supporting a research project at the Medical Center. I wish that more of you would get yourselves involved. In Georgia, the State Medical Association has taken this on as a major priority.

I know that many demands are made upon your time and energies. It seems that in every community, the physician is expected to be everything to everyone. But doesn't that speak well for the medical profession? Shouldn't we live up to these expectations? I call on all of you to expend extra effort to be effective as good citizens of your communities. I have endeavored to do this for many years and have never regretted the effort. The many organizations that I have served on the local, state and national levels have always appreciated the fact that a busy physician would take time to work with them. They ask little of you and appreciate everything. There is a great deal of personal satisfaction in this type of experience.

Over the years, we have had an excellent relationship with our rural people. The Cooperative Extension Service and the Farm Bureau have been our entre. We have worked with these groups in promoting more healthful communities and better health education. Here in Arkansas we have been consumer oriented long before the federal government saw the need.

I know that many of you are concerned with the PSRO Law and its effect. You wonder where you'll find the time to do all the required things and still practice medicine. We have some colleagues who are studying methods of helping us. A group of hospital administrators, together with their Chiefs of Staff are working on a regional PSRO plan that would cut down the work required of the individual physician and still meet the requirements of the law. We have many friends. We need to work with them.

We have all been disturbed with what we term interference in the care of our patients. Yet, it

has not all been bad. We have found ourselves taking post-graduate courses, thus updating our knowledge and methods of practice. We have learned new record keeping systems and have found them to be practical. We have joined together in groups and find that we have more leisure time to behave more like normal human beings and do the many things that others do. Our co-workers in the health field are being remunerated on a level closer to a living wage and are being treated more like first class citizens. Many of you can remember when health workers worked for the love of humanity alone. We still need that dedication, but we also need practical recognition. We still have a way to go, but we are getting closer.

At the present time there is plenty of discrimination against the health field in wage and price controls, but that too will change through organized effort. We, the physicians, must learn to work with our allies. The public has learned that in addition to being a right, health is important. For years, we fought to have people come in for regular check-ups and practice preventive methods of health care. Now we are overwhelmed because many are doing just that. Our problem is that the wrong ones are doing it. The people who need it the most are staying away. We must continue a policy of health education and work with our allies in providing good health care. I envision a time when Dr. Sidney Garfield's "worried well" patients will be first seen by nurses trained to separate them from the sick; who will provide reassurance and will schedule them for satisfactory workups. Meanwhile the really sick will be brought to the physician who has been trained to care for them; a task that he really wants to perform. That is why he became a physician in the first place.

We are living in exciting times. Will Menninger once said to a group in which I participated, "Every change is a loss." However, none of us is too old to appreciate change for the better. Our future is what we make it. We are being challenged to make it a good one.

Looking ahead to the next year then, we find ourselves obligated to work with our State Health Department in stamping out venereal disease in the state. We have promised to help promote Home Health Services, particularly for our elderly disabled population. Remember, we the physicians have to make the referrals. We are obligated to support Areawide Health Planning

in our own regions. We have to practice there. Our facilities and climate for practice will be determined by our own input. We can best serve by agreeing to join the numerous advisory councils in our communities and development regions. We have developed a Foundation for Health Care in our state. We must make it an effective body that can serve the profession and the people effectively. We must continue to work with the nursing profession to better define our roles and to be of mutual assistance to each other. We form together the leadership of the health team.

You are aware that the office of President of the Arkansas Medical Society is not an influential one. The President is merely your representative. The Council and the Delegate body are the true executives of this organization. However, as your president, it becomes incumbent upon me to represent you in the best way I know how. I am proud of our Society and appreciate the honor of serving as its chief officer. I will represent you honestly in our relationship with other organizations and with the people of our State. I will be available for all duties incumbent upon the office. The year ahead will be a busy one. I have already had the pleasure of working with the Executive Committee in many tasks and look forward to the next year.

I am hopeful that our committees next year will continue to be effective. It is only on the committee level that the work program of the society can function. I look forward to an innovative, exciting year. When I have completed the year ahead, Thomas Jefferson's truism probably will apply. "No man will ever bring out of the Presidency the reputation which carries him into it." However, thank you for the opportunity of letting me try.

MEMORIAL SERVICE

A joint Society-Auxiliary Memorial Service was held on Tuesday morning with Society President John P. Wood presiding.

The Memorial Address was by Dr. Ira S. Sanders of Temple B'nai Israel, Little Rock.

Dr. Wood read the following names of deceased members of the Society:

H. K. Carrington, Magnolia
Ellis P. Cope, Little Rock
Joseph P. DeLaney, Gainesville, Florida
Thomas P. Foltz, Fort Smith

PROCEEDINGS

C. E. Garratt, Hot Springs
E. M. Gray, Mountain Home
Paul Hudgins, Little Rock
W. E. Jackson, Rison
R. L. Johnson, Blytheville
Sam J. Kuykendall, Little Rock
W. A. Lamb, Little Rock
John R. Martin, Gravette
Franklin T. Oates, Lepanto
B. G. Parker, Booneville
Gerald K. Patton, Fort Smith
Waldo A. Regnier, Crossett
James B. Rice, Pine Bluff
J. Max Roy, Forrest City
Kenneth A. Siler, Harrison
Himter C. Sims, Sr., Blytheville
W. Myers Smith, North Little Rock

Brooks R. Teeter, Russellville
Jack N. Thicksten, Alma
C. Fletcher Watson, Little Rock
William S. Woodcock, Temple, Texas

Mrs. A. S. Koenig, President of the Auxiliary,
read the following names of deceased members
of the Auxiliary:

Mrs. Drew Agar, Little Rock
Mrs. D. W. Goldstein, Fort Smith
Mrs. M. C. Hawkins, Jr., Searcy
Mrs. Henry Hollenberg, Little Rock
Mrs. W. Duane Jones, Fort Smith
Mrs. J. B. Wharton, Sr., El Dorado
Mrs. James D. Wilson, Little Rock
Mrs. Henry M. Sims, Fort Smith
Mrs. W. R. Bathurst, Little Rock



FINAL SESSION

HOUSE OF DELEGATES

WEDNESDAY, MAY 1, 1974

Speaker of the House Amail Chudy called the final meeting of the convention session of the House of Delegates to order at 10:00 A.M. on Wednesday, May 1, 1974, in the Golden Knight room of the Camelot Inn, Little Rock. He called on Ken Lilly for the invocation.

The Executive Vice President, Mr. Schaefer, called the roll of members. The following delegates, officers, and members seated as delegates by action of the House were present:

ARKANSAS, R. H. Whitehead; BAXTER, John Guenther; BENTON, Ed McCollum; BOONE, Mahlon O. Maris; BRADLEY, George F. Wynne; CLARK, Jerry Mann; COLUMBIA, Charles L. Weber; CRAIGHEAD-POINSETT, James Sanders, James Robinette, Joe Verser; CRAWFORD, Millard C. Edds; DREW, Charles E. Hicks; FAULKNER, Jimmie J. Magie; GARLAND, Patrick Knight; GRANT, Clyde Paulk; GREENE-CLAY, A. J. Baker; HOT SPRING, Robert White; INDEPENDENCE, Jim E. Lytle; JEFFERSON, T. E. Townsend, George Robertson; JOHNSON, Boyce West; LAWRENCE, Ralph Joseph; LEE, Dwight W. Gray; LITTLE RIVER, James D. Armstrong; LOGAN, William R. Daniel; MISSISSIPPI, Francis E. Utley; MONROE, N. C. David; OUACHITA, Cal R. Sanders; POPE-YELL, James Kolb, Gerald Stolz; PULASKI, Edgar Easley, Raymond Biondo, F. R. Buchanan, John Harrel, James L. Smith, Fred Kittler, Curry Bradburn, John Satterfield, James Weber, J. Mayne Parker, Purcell Smith, George Mitchell, Robert Dickins, David Newbern, Frank Westerfield, Winston Shorey; SEBASTIAN, Carl Williams, Robert P. Hughes, Jr., Kenneth Lilly, A. C. Bradford, Kemal Kutait; UNION, B. L. Moore, C. E. Tommey; WASHINGTON, W. Ely Brooks, Wendell Ward, Coy C. Kaylor; COUNCILORS, Eldon Fairley, John Kirkley, John Bell, John Burge, Raymond Irwin, Paul Gray, J. B. Jameson, John Moore, Lynn Harris, Robert McCrary, William S. Orr, Payton Kolb, Henry Kirby, Morriss Henry, A. S. Koenig, C. C. Long; President Ben N. Saltzman, First Vice President Guy R. Farris, Secretary Elvin Shuffield, Treasurer Kenneth R. Duzan, Speaker Amail Chudy, Vice Speaker Charles Wilkins, and Past Presidents John Wood, Stanley Applegate, Ross

Fowler, H. W. Thomas, Joe Verser, H. King Wade, Jr., and T. Duel Brown.

The Chairman of the Nominating Committee submitted the following report:

REPORT OF THE NOMINATING COMMITTEE

C. Lynn Harris, Chairman

The Nominating Committee met and selected the following proposed slate of officers:

For President-elect: T. E. Townsend, Pine Bluff; Joe Verser, Harrisburg

For First Vice President: G. Thomas Jansen, Little Rock

For Second Vice President: Asa Crow, Paragould

For Third Vice President: Donald Toon, Crossett

For Treasurer: Kenneth R. Duzan, El Dorado

For Secretary: Elvin Shuffield, Little Rock

For Speaker of the House of Delegates: Amail Chudy, North Little Rock

For Vice Speaker of the House of Delegates: Charles F. Wilkins, Jr., Russellville

For Councilors for terms expiring April 1976:

1. John B. Kirkley, Jonesboro
2. John E. Bell, Searcy
3. L. J. Pat Bell, Helena
4. John P. Burge, Lake Village
5. J. B. Jameson, Jr., Camden
6. C. Lynn Harris, Hope
7. Robert F. McCrary, Hot Springs
8. William S. Orr, Jr., Little Rock
9. Henry V. Kirby, Harrison
10. A. S. Koenig, Fort Smith

and for a term expiring April 1975, replacing Dr. James C. Bethel, resigned: Curtis Clark, Sheridan.

Delegate to the American Medical Association: C. C. Long, Ozark

Alternate Delegate to the American Medical Association: Joe Verser, Harrisburg

Member-at-Large position on the Arkansas State Medical Board: Stanley Applegate, Springdale

Dr. Harris thanked Mahlon Maris for serving as secretary of the Committee and thanked the other members who served with him on the committee.

Joe Verser requested that his name be withdrawn as a nominee for the position of president-

elect. The House then unanimously elected T. E. Townsend as the president-elect. Speaker Chudy requested that John Kirkley and H. W. Thomas escort Dr. Townsend to the podium. Dr. Townsend addressed the House as follows:

"As most of you know, I don't like to talk. I assure you that I am not going to make a speech. I do thank all of you and do consider you my friends. I would like personally thank some of you at a later time for all you have done and I feel like following Ben Saltzman's speech last night, I should say very little. But I do indeed thank you very much."

Upon motion of Orr and Kirby, the House elected by acclamation the remainder of the slate of officers as presented by the Nominating Committee.

Speaker Chudy called for reports of the Reference Committees. The reports were given as follows:

REPORT OF REFERENCE COMMITTEE # ONE
Raymond A. Irwin, Chairman

Reference Committee Number One met on Sunday, April 28, 1974. All members of the committee were present: Raymond V. Biondo, John H. Moore, Henry V. Kirby, Raymond A. Irwin, Chairman.

The following reports were considered by the committee:

1. Committee on Cancer Control
2. Committee on Mental Health
3. Sub-Committee on Traffic Safety
4. Advisory Committee to the Medical Assistants Society
5. Student AMA Liaison Committee
6. Professional Relations Committees—I, 2, 4, 6, 7, 8 and 9 districts
7. Reports of Councilors—2, 3, 6 and 8 districts
8. Report of the AMA Delegate
9. Report from Arkansas Drug Abuse Authority
10. Report of the State Health Department
11. Report of the Advisory Group, Regional Medical Program

The Committee recommends that these reports be accepted without change and I so move. There being no objection, it was so ordered by the Speaker.

The report of the Professional Services Review Organization was discussed and the committee recommends that it be accepted as presented.

However, much discussion centered around the name of this committee and the confusion that exists as a result of the PSRO created by the Bennett Amendment.

The Committee endorses the Council's action in changing the name of this committee to the Medical Services Review Committee. Also, the reference committee compliments Dr. Wilkins' committee for the work they have done during the past year.

The committee recommends approval of this report without change and I so move. There being no objection, it was so ordered by the Speaker.

Mr. Speaker, this concludes the report of Reference Committee Number One. I wish to thank those who appeared before this reference committee, my fellow members of the committee, and those members of the staff who assisted us.

Upon motion of Dr. Irwin, the report was approved by the House as presented.

REPORT OF REFERENCE COMMITTEE # TWO
W. Payton Kolb, Chairman

Mr. Speaker and members of the House of Delegates. Your Reference Committee Number Two gave careful consideration to the items referred to it and makes the following report.

After formal hearings and committee discussions, the following are reported out of committee with recommendation for acceptance as written. The reference committee has determined that all recommendations either have been or are being implemented.

1. Sub-Committee on Liaison with Vocational Rehabilitation, Paul G. Henley, Chairman
2. Committee on Medicine and Religion, C. R. Ellis, Chairman
3. Committee on Insurance, Harry Hayes, Jr., Chairman
4. Advisory Committee to the Selective Service System, L. A. Whittaker, Chairman
5. Report of the Fifth Councilor District (two reports), J. B. Jameson and John H. Moore, Councilors
6. Report of the Ninth Councilor District, Morris M. Henry, Councilor
7. Report of the Tenth Councilor District, C. C. Long and A. S. Koenig, Councilor
8. Report of the Executive Vice President, Mr. Paul C. Schaefer

9. Report of the Arkansas State Medical Board, January 1, 1973-January 1, 1974, Joe Verser, Secretary
10. Committee on Arrangements for Annual Session, G. Thomas Jansen, Chairman
11. Physician-Nurse Joint Practice Committee, Robert F. McCrary, Chairman
12. Committee on Public Relations, A. C. Bradford, Chairman
13. Committee on Medical Legislation, Elvin Shuffield, Chairman
14. Sub-Committee on National Legislation, William S. Orr, Jr., Chairman

Mr. Speaker, your reference committee recommends approval of the above as written. There being no objection, it was so ordered by the Speaker.

After formal hearings and committee discussion, the following are reported out of committee with recommendations of amendment as indicated and then approval. The reference committee has determined that with one exception, all recommendations either have been or are being implemented.

1. Medical Education Foundation for Arkansas, Robert Watson, President. The Reference Committee has determined that as of the date of anticipated acceptance of this report, the stated investment of \$40,000 has increased to \$50,000 and the anticipated earnings of \$3,000 have increased to \$3,800.

Mr. Speaker, your reference committee recommends approval of the above as amended. It was so ordered.

2. Sub-Committee on Liaison with the Auxiliary, A. S. Koenig, Chairman.

In regard to the second recommendation in which the committee "recommends that the Arkansas Medical Society request county medical societies to send statements for Auxiliary dues at the same time statements for county and state dues are submitted", your reference committee agrees in principle; however, it recommends this be amended by substituting the word "recommend" for "request" for the following reasons:

- (1) The word "request" implies more authority of the State Society over the county society than actually exists, and
- (2) Billing procedures of numerous county

societies are not such that this can be practical.

Mr. Speaker, your reference committee recommends approval of the above as amended. It was so ordered by the Speaker.

Mr. Speaker, this concludes the report of your Reference Committee Number Two. I wish to thank those who appeared before this reference committee, my fellow members of the committee—W. Mage Honeycutt, Ken Lilly and Lynn Harris—and the Arkansas Medical Society staff for its assistance.

Upon motion of Kolb, the House approved the entire report as presented.

REPORT OF REFERENCE COMMITTEE # THREE A. S. Koenig, Chairman

The Reference Committee met following the House of Delegates on Sunday, April 28th, and considered the following items of business:

1. Report of the Committee on Public Health, Ben N. Saltzman, Chairman.

The report is accepted as written. There are no recommendations necessary; it is for informational purposes only.

Mr. Speaker, the reference committee recommends that the Report of the Committee on Public Health be received for information. It was so ordered.

2. Report of the Committee on Medical Education, C. Lewis Hyatt, Chairman.

The report includes, in addition to a discussion of the Area Health Education Center, a suggestion that the Arkansas Medical Society sponsor the formation of a medical education foundation for the purpose of continuing education. This is noted and the suggestion and the discussion pertains to continuing education for physicians in the State. It is the suggestion of the committee that it be brought to the attention of the Council for further discussion.

Mr. Speaker, your reference committee recommends that the report of the Committee on Medical Education be received for information and referral as indicated above. It was so ordered.

3. The Committee on Veterans Administration Affairs, J. Warren Murry, Chairman.

The reference committee notes that the committee would like to recommend a better atmosphere of understanding and cooperation between Veterans Administration Hospitals and the State Medical Society. It is

the reference committee's opinion that members of the medical staffs of these hospitals should actively participate in the affairs of the Arkansas Medical Society and that membership of these individuals should be solicited and their participation in Society activities is to be encouraged.

Mr. Speaker, the reference committee recommends the adoption of the report of the Committee on Veterans Administration Affairs as presented. It was so ordered.

4. The report of the Committee on Constitutional Revisions, Lee B. Parker, Jr., Chairman.

The report of this committee contained changes in the Constitution and By-Laws which were presented to the first meeting of the House of Delegates for final action. They were passed by the House of Delegates and no further comment is necessary on the part of the reference committee.

Mr. Speaker, the reference committee recommends acceptance of the report of the Committee on Constitutional Revisions as presented. It was so ordered.

5. Medical School Committee, Ross Fowler, Chairman.

The report of this committee points out the necessity for increasing the output of physicians engaged in primary care and family practice. This statement is endorsed wholeheartedly by the committee. The University of Arkansas Medical Center is to be encouraged to use all of its facilities for increasing the production of primary care physicians for the State.

Mr. Speaker, the reference committee recommends the adoption of the report. It was so ordered.

6. The Report of the Council, C. C. Long, Chairman.

The reference committee notes the very fine report of the Chairman of the Council of the meetings held throughout the year. The committee calls to the attention of the membership the great deal of time which is spent by the members of the Council in business for the Society, for which they are due the gratitude of the membership.

Mr. Speaker, the reference committee recommends the adoption of the Report of the Council as presented. It was so ordered.

7. Budget Committee, H. W. Thomas, Chairman.

There was considerable time devoted to discussion of the budget for the coming year. A criticism which was offered by one of the members was that it was not presented in sufficient detail to satisfy questions which he had about the budgeting and expenditure of funds by the Society. The reference committee suggests that it would be impractical to publish the total budget as it is presented to the Council, but a statement should be included in the Budget Committee summary as published that the complete budget is available to any member for his inspection at his request. This comment should properly be included with the Budget Committee report as published in the Journal.

Mr. Speaker, the reference committee recommends the adoption of the Budget Committee report with the suggestion made about making the detailed budget available to members upon request. There being no objection, it was so ordered by the Speaker.

8. Report from the Arkansas Family Planning Council, E. Stewart Allen, Representative.

The report of the Family Planning Council is noted. The reference committee commends the purpose of the program.

Mr. Speaker, the committee recommends that the report be received for information. It was so ordered.

9. Arkansas Council for Health Careers, Bob Waters, Executive Director.

This non-profit agency was first established by the Arkansas Medical Society and the Woman's Auxiliary to the Arkansas Medical Society, and since its inception has been subsidized financially by both bodies. One major achievement of the past year has been the preparation of a Health Resources Manual which has been made available to all the educational institutions in the State for the use of guidance counselors in directing interested students to the proper channels of information about various careers in the health professions. Its work is to be commended.

Mr. Speaker, the reference committee recommends that the Report of the Arkansas Council for Health Careers be received for information. It was so ordered.

10. Mr. Speaker, the next item in the report of the reference committee concerns resolutions submitted by Jefferson County Medical Society, Miller County Medical Society, Union Council Medical Society, and Pulaski County Medical Society. Inasmuch as the intent of each of these resolutions was essentially identical, they were considered together, rather than individually. During the course of the discussion, a representative of the Miller County Medical Society expressed support for the resolution presented by the Jefferson County Medical Society. There was considerable discussion and there seemed to be a general realization that under the existing law, the most constructive course of action at the present time would appear to be a continuation of the effort to have the Arkansas Foundation for Medical Care designated as the PSRO body for the State and that activity for the purpose of implementing this goal should be continued. It was obvious from the discussion that the consensus of the membership of the Medical Society did not agree that the development of the Foundation in any way should represent endorsement of the law by the Medical Society. To synthesize the intent of the four resolutions presented, your reference committee offers the following resolution:

"Resolved that the Arkansas Medical Society actively work for the repeal or amendment of Professional Standards Review Organization legislation while fulfilling the legal requirements of the current law through the establishment of the Arkansas Foundation for Medical Care."

The Reference Committee suggests that the Speaker of the House of Delegates appoint an ad hoc committee of the House to explore the most appropriate manner to support repeal or amendment of the law.

Mr. Speaker, your reference committee recommends the adoption of the resolution as presented by the committee.

A motion by Roberson and Maris for deletion of the phrase "while fulfilling the legal requirements of the current law through the establishment of the Arkansas Foundation for Medical Care" was defeated.

Berry Moore of Union County moved amend-

ment of the resolution by addition of the following:

"That this House of Delegates, as individual physicians and through the officers of the Society and its Council on Legislation, work to inform the public and its Congressional representatives as to the potential deleterious effects of this law on the quality, confidentiality and cost of medical care."

The amendment was approved by the House.

The House then considered the resolution presented by the Reference Committee and amended by Dr. Moore's motion. The resolution as amended was approved by the House.

Dr. Koenig then restated the reference committee's recommendation that the Speaker of the House appoint an ad hoc committee to consider the most appropriate manner to support repeal or amendment of the law. The recommendation of the Reference Committee was approved by the House.

Dr. Koenig then recommended adoption of the report of the reference committee as a whole as amended and the House so voted.

Dr. Koenig thanked those who appeared before the reference committee, his fellow members of the committee—James L. Dennis, Purcell Smith and L. J. Pat Bell—and those members of the staff who assisted the committee.

The Chairman of the Council presented the following report covering actions of the Council at meetings held during the convention.

REPORT OF THE COUNCIL

C. C. Long, Chairman

COUNCIL MINUTES

The Council met on Sunday, April 28th, and transacted the following business:

1. Directed Mr. Warren, the Society's legal council, to continue to resist the increase in malpractice insurance rates proposed by the Aetna Insurance Company.
2. Voted to defer the election of a councilor from the seventh district to replace Dr. James Bethel who resigned and to place the election in the House of Delegates with other officers.
3. Referred to the Committee on Constitutional Revisions the lack of a definite policy in the Constitution for election of councilors to replace those unable to complete their terms.

4. Elected the following to serve on the ArkPac Board for the following year:

Dr. Kemal Kutait	Dr. E. L. Hutchison
Dr. A. C. Bradford	Dr. G. Thomas Jansen
Dr. Ross Fowler	Mrs. C. Lynn Harris
Dr. Larry Lawson	Mrs. Charles F. Wilkins
Dr. James L. Smith	Dr. Allie Andrews
Dr. Sybil Hart	Dr. William S. Orr, Jr.

5. Accepted and approved the annual report of Audit.
6. Approved the following list of dues-exempt members:

Retirement

Horace Barnett	James D. Kinley
William K. Bell	Dewey Sloan
R. C. Shanlever	Sloan Sanford
J. H. Downs	Charles Ault
A. B. Dickey	R. M. Blakely
Allen R. Russell	M. M. Brown
R. R. Kirkpatrick	Alan G. Cazort
W. Decker Smith	Hoyt L. Choate
John H. Miller	Eva F. Dodge
Martin F. Heidgen	Ruth H. Junkin
Roy I. Millard	Harold N. Miller
William McNamara	James N. Nisbett
E. J. Chaffin	Carl A. Rosenbaum
Jeff J. Baggett	Frances C. Rothert
H. L. Boyer	W. A. Snodgrass
Charles M. Brizzolara	Irving Spitzberg
William J. Butt	John Stathakis
Vincent Lesh	James S. Taylor
Lawrence Siegel	Charles Wallis
Ross Van Pelt	Arthur M. Washburn
M. C. Hawkins, Jr.	M. J. Kilbury, Jr.

Disability

Eugene Hildebrand	Virgil Payne
Miles F. Kelly	Benjamin F. Banister
H. H. Holt	Daniel H. Autry
J. H. Williams	Bryce Cummins
Henry Crane	

Military Service

Robert R. Sykes

Internship and Residency

James M. Stalker	James A. Jenkins
James H. Hickman	Larry H. Johnson
Jerry C. Holton	Spencer L. Johnson
Jim C. Porter	Edwin C. Jones
William J. Stocker	Richard Jordan
William D. Morris	George M. Kent

Wallace Al Thomas	Joe D. King
Frederick E. Joyce, Jr.	Nicholas Lang
Alan Aycock	Charles Ledbetter
Eugene H. Ball	Linda Markland
C. E. Ballard	William C. Martin
Larry Battles	James Massey
James W. Bean	Kenneth Meacham
James Beckman	Paul D. Meier
Lloyd G. Bess	Franklin Minirth
David Bevans	O. J. Mitchell
James Boger	Carol Mittelstaedt
Fay Boozman	Karl Moser
Rene Bressinck	William McBryde
Hugh Burnett	Charles McClain
John Canavosio	Sam McGuire
David Crittenden	James R. McNair
Steven Davie	Jeffrey Neimann
Frank Dodson	Larkus Pesnell
Larry Doss	Alvaro Ramirez
Robert Eubanks	Michael C. Reese
Joseph Fetzek	Robert L. Reese
Robert Fisher	Roland C. Reynolds
James Fraser	Fred Robertson
Michael Futrell	David H. Roberts
Robert Galbraith	Phillip E. Rosen
Don Greenway	Richardo Sotomora
Donald Guinn	Hoy Speer
John Hampton	Aubry Talley
Murray Harris	Arthur H. Thomas
Ruben Harris	Stephen Tilley
John Hearnberger	John G. Watkins, III
Thomas Jefferson	Paul C. Williams

7. Requested the Insurance Committee to check with those insurance companies carrying Arkansas Medical Society endorsed plans to see if they would be willing to continue coverage for those members who move to another State.
8. Approved the change in the name of the Searcy County Medical Society to henceforth be named the Van Buren County Medical Society.
9. Directed that Dr. Ross Fowler of the Boone County Medical Society and Mr. Schaefer go to Washington to meet with Senator McClellan to try to eliminate the five fee areas under Medicare. Dr. George Mitchell volunteered to go with the Medical Society representatives and he will be accompanied by Mr. Bob Shoptaw.
10. Directed that a resolution of appreciation be written for the services of Dr. Carl Wilson

of Fort Smith as chairman of the Tenth Councilor District Professional Relations Committee.

11. Elected Dr. H. D. Luck of Arkadelphia as an alternate representative on the Paid Prescriptions Review Organization for the Southwest Arkansas region.
12. Voted to join with Oklahoma and Kansas in a two-hour hospitality suite at the AMA meeting in Chicago in June.
13. Requested the Budget Committee to study the matter of participation in AMA hospitality suites and other requests for funds and recommend policies to the Council.
14. Nominated the following physicians as representatives of their specialties on the Professional Services Review Organization:
Dermatology: Dr. Charles Davis, Pine Bluff
Ophthalmology: Dr. P. J. Deer, Little Rock
Otolaryngology: Dr. Ellery Gay, Jr., Little Rock
Radiology: Dr. Robert C. Elliott, Searcy
Allergy: Dr. Edwin Whiteside, Fayetteville
15. Adopted a policy that, in the future, when three nominees for the Professional Services Review Organization are not submitted by the specialties, the single nominee submitted will be disregarded and the Council will itself select three nominees and elect one of them. Specialty societies are to be notified again of this policy.
16. Inasmuch as no nominees had been received from the Surgery Section, the Chairman was directed to appoint a committee of three to select three surgery nominees for election at the Monday meeting of the Council.
17. Appointed the following committee to work on plans for observance of the Medical Society's centennial anniversary which will occur in October 1975:
Dr. Robert Watson, Chairman
Dr. Harry Hayes
Dr. H. King Wade, Jr.

The Council met on Monday and transacted business as follows:

1. Elected Dr. Donald Duncan of Texarkana to represent Surgery on the Professional Services Review Organization.
2. Elected Dr. Samuel Landrum of Fort Smith to serve on the Professional Relations Committee of the Tenth District and appointed

Dr. Charles Wilkins of Russellville as chairman of that committee.

3. Added Drs. D. W. Goldstein, W. F. Adams, and Virgil Kennedy to the dues exempt category due to retirement.
4. Reappointed Dr. Ernest Hartmann and Dr. Coy Kaylor to succeed themselves on the Arkansas State Arbitration Commission.
5. In view of the fact that Dr. J. P. Price is Chairman of the Board of Trustees of Blue Cross-Blue Shield, Dr. Price was re-elected for another six-year term on the Board.
6. Appointed Dr. Robert Watson to succeed himself as a member of the Board of the Medical Education Foundation for Arkansas.
7. Nominated Dr. Henry Hearnberger to the Arkansas Drug Abuse Authority.
8. Nominated the following men for AMA Councils and Committees:

MEDICAL ASPECTS OF SPORTS:

Dr. John McCollough Smith
Dr. F. R. Buchanan
Dr. Herbert Wren

COMMITTEE ON QUACKERY:

Dr. Joe Verser

9. After discussion, the Council voted to vigorously oppose the following legislative measures now before the Congress:
H.R. 12053, Health Planning and Regulation by Congressman Paul Rogers of Florida.
H.R. 13995, Health Policy Resources Development Act—similar to H.R. 12053 and also by Congressman Rogers.
S. 2994, National Health Planning and Development Act of 1974, and
H.R. 13870 and S. 3286, the Kennedy-Mills National Health Insurance Plan.
10. Directed that resolutions of appreciation for the work and dedication of Dr. James L. Dennis and Dr. Winston K. Shorey be drawn up and presented to the House.
11. Discussed having a politically-oriented dinner at the 1975 meeting on Monday night following the Blue Cross-Blue Shield party, with national figures to be invited.
The Council voted to refer the idea to the Program Committee for consideration.

The Council met on Tuesday and conducted business as follows:

1. Voted to approve in principle the proposed joint Arkansas Hospital Association-Arkansas Medical Society statement on price increases to be placed in the newspaper after the ending of controls.
2. Heard a discussion of the problems facing American Medicine by Dr. Malcolm Todd, president-elect of the American Medical Association.
3. Heard a complaint by Dr. George Roberson of the Society's apparent inability to handle complaints against physicians who are not members of the Arkansas Medical Society. The Council voted to recommend to the State Medical Board that it double the number of meetings it holds annually. The Board now meets semi-annually and the Council recommends that they meet quarterly so that complaints against member and non-member physicians may be handled more expeditiously.
4. Voted to change the name of the present Professional Services Review Organization, which meets with Blue Cross-Blue Shield each month, to the Medical Services Review Committee. This change was felt desirable so that there would be less confusion among the membership when the legally mandated Professional Standards Review Organization is discussed.
5. After further discussion of Senator McClellan's efforts to help the Medical Society change the Medicare fee system from five areas to one, it was voted by the Council to send four delegates to Washington instead of two as previously voted.

WEDNESDAY

The Council met on Wednesday and transacted the following business:

1. Rejected a proposal for Society endorsement of a collection agency program;
 2. Rescinded previous action approving a joint Arkansas Hospital Association-Arkansas Medical Society newspaper statement to the citizens of the State on price increases after termination of price controls.
- Upon motion of Dr. Loug, the House approved the report of the Council.

The Chairman of the Council Resolutions Committee, W. Payton Kolb, then submitted the following resolutions for approval of the House:

RESOLUTION OF APPRECIATION

WHEREAS, the 98th Annual Session of the Arkansas Medical Society, just completed in Little Rock, has been an outstanding success; and

WHEREAS, the management of the Camelot and the Convention Center have facilitated our efforts in every way in providing meeting rooms and otherwise assisting in arrangements for our meeting; and

WHEREAS, the hours of thought and work devoted by Dr. G. Thomas Jansen and the Committee on Arrangements have resulted in an excellent program by distinguished guest speakers, and

WHEREAS, the commercial and scientific exhibits were of great benefit to our gathering and the courteous and careful attention of the attendants was quite helpful, and

WHEREAS, members of the Arkansas State Medical Assistants Society have been most kind and gracious to us during the meeting by serving coffee; and

WHEREAS, Mrs. Louis K. Hundley has contributed greatly to the enjoyment of the members with the beautiful decorations for the various functions; and

WHEREAS, the eighth councilor district—Drs. William S. Orr and W. Payton Kolb and the individual members thereof—have been gracious hosts, and have added greatly to our enjoyment; and

WHEREAS, the Little Rock Country Club made its facilities available for our golf tournament; and

WHEREAS, Mr. George Douthit and other members of the news media have given extended coverage of the meeting; and

WHEREAS, the Woman's Auxiliary contributed greatly through their diligence, attendance, and inspiration,

NOW, THEREFORE, BE IT RESOLVED, that the Arkansas Medical Society records its sincere appreciation and expresses its heartfelt thanks to our host city and those heretofore mentioned, for the cordial welcome, the extension of unbounded hospitality, the expression of good will and kindly feelings shown each member of the Society who was privileged to attend this session. We shall ever hold in pleasant memory the hours spent as their guests during the last several days.

RESOLUTION RE: BLUE CROSS-BLUE SHIELD

WHEREAS, the 98th Annual Session of the Arkansas Medical Society, just completed in Little Rock, has been an outstanding success; and

WHEREAS, Arkansas Blue Cross-Blue Shield has been most kind and generous in hosting a party for the membership on Monday evening;

NOW, THEREFORE, BE IT RESOLVED, that the Arkansas Medical Society expresses its thanks and appreciation to Arkansas Blue Cross-Blue Shield and to its representatives who have been so gracious to us.

Both of the above resolutions were unanimously approved by the House.

RESOLUTION RE: CARL WILSON

WHEREAS, Carl Wilson, of Fort Smith, Arkansas, has served faithfully and conscientiously as chairman of the Professional Relations Committee of the Tenth Councilor District for many years, and

WHEREAS, Dr. Wilson has personally requested that he be replaced in the position, THEREFORE,

BE IT RESOLVED, That the Arkansas Medical Society extends to Dr. Wilson its sincere appreciation for his many years of dedicated service in the cause of good medicine.

W. Payton Kolb, Chairman
Morris M. Henry, Member

This resolution was unanimously approved and applauded by the House.

RESOLUTION RE: JAMES L. DENNIS

WHEREAS, James L. Dennis, as Vice President for Medical Affairs of the University of Arkansas, has served faithfully and diligently in his position, and

WHEREAS, The Arkansas Medical Society takes note of the special efforts Dr. Dennis has made in the cause of post-graduate education in medicine, THEREFORE,

BE IT RESOLVED, That the Arkansas Medical Society extends to Dr. Dennis its sincere appreciation for his dedicated service, and further,

BE IT RESOLVED, That the Arkansas Medical Society encourages the University of Arkansas Medical Center to continue and expand the post graduate education programs, pledging the support of the Society in those activities.

W. Payton Kolb, Chairman
Morris M. Henry, Member

RESOLUTION RE: WINSTON K. SHOREY

WHEREAS, Winston K. Shorey, is retiring after many years as Dean of the School of Medicine of the University of Arkansas, and

WHEREAS, Dr. Shorey has served faithfully and diligently in this position, including special efforts to improve relations between the staff and students of the University and the physicians of the State, THEREFORE,

BE IT RESOLVED, That the Arkansas Medical Society extends to Dr. Shorey its sincere appreciation for his dedicated service to the University of Arkansas, the people of Arkansas, and the Arkansas Medical Society.

W. Payton Kolb, Chairman
Morris M. Henry, Member

The resolutions expressing appreciation to Drs. Shorey and Dennis were unanimously adopted by the House by a standing ovation.

The House heard a recommendation from A. J. Baker of the Greene-Clay County Medical Society that the Society officially express its appreciation and support to Congressman Bill Alexander of the First Congressional District of Arkansas in his efforts to repeal the Professional Standards Review Organization legislation. The House directed that this be accomplished through a letter from the president and a telephone call from the executive vice president.

Upon motion of Kolb and Fowler, the House approved the following nominations for submission to the Governor for vacancies on the Arkansas State Board of Health:

Second Congressional District:

Jack Gardner, Searcy
W. J. Ketzel, Batesville
Max Baldrige, Heber Springs

Fourth Congressional District:

Warren S. Riley, El Dorado
William C. Whaley, Warren
D. L. Toon, Crossett

Speaker Chudy expressed thanks to Mr. Schaefer, Mr. McIntosh and the other members of the headquarters staff and, at his suggestion, the House voted to name Miss Richmond "sweetheart" of the House.

Tom Jansen, Chairman of the Arrangements Committee, expressed thanks to his committee members and to those who attended the meeting. He expressed pleasure at having the Society meeting in Little Rock. He requested that the Society pass on to the appropriate people the complaints

which had been voiced regarding the hotel facilities and the House concurred with the recommendation.

The House then extended its thanks and appreciation to Dr. Jansen and his committee for their work in arranging the 98th Annual Session.

The House voted to go to Hot Springs for its 1976 meeting.

The House session adjourned at 11:25 A.M.

REORGANIZATIONAL MEETING OF THE COUNCIL

The Council of the Society met briefly following adjournment of the House of Delegates to reorganize for the ensuing year. C. C. Long was

reelected chairman of the Council and Alfred Kahn, Jr., was named Editor of the Journal.

ATTENDANCE

Physicians	445
Medical Students	30
Medical Assistants, Nurses	18
Scientific Exhibitors	36
Commercial Exhibitors	123
Others	25

	677
Auxiliary Registration	120

	797

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY 1974-1975

President	Ben N. Saltzman, 126 West Sixth, Mountain Home 72653
President-elect	T. E. Townsend, 1420 W. 43rd, Pine Bluff 71601
First Vice President	G. Thomas Jansen, 500 S. University, Little Rock 72205
Second Vice President	Asa A. Crow, 320 South 10th, Paragould 72454
Third Vice President	Donald L. Toon, 310 North Alabama, Crossett 71635
Secretary	Elvin Shuffield, 1000 Wolfe, Little Rock 72202
Treasurer	Kenneth R. Duzan, 443 West Oak, El Dorado 71730
Speaker, House of Delegates	Amail Chudy, 1801 Maple, North Little Rock 72114
Vice Speaker of House	Charles Wilkins, 3005 W. Main Place, Russellville 72801
Journal Editor	Alfred Kahn, Jr., 1300 West Sixth, Little Rock 72201
Delegates to AMA	C. C. Long, 110 West Commercial, Ozark 72949 Purcell Smith, P. O. Box 5675, Little Rock 72205
Alternates	Joe Verser, P. O. Box 106, Harrisburg 72432 T. E. Townsend, 1420 W. 43rd, Pine Bluff 71601
Executive Vice President	Mr. Paul C. Schaefer, P. O. Box 1208, Fort Smith 72901

EXECUTIVE COMMITTEE OF THE COUNCIL

Chairman of the Council	C. C. Long, 110 West Commercial, Ozark 72949
President	Ben N. Saltzman, 126 West Sixth, Mountain Home 72653
President-elect	T. E. Townsend, 1420 W. 43rd, Pine Bluff 71601
Secretary	Elvin Shuffield, 1000 Wolfe, Little Rock 72202

COUNCILORS

District	Councilor Term Expires '75	Councilor Term Expires '76	Counties in District
1.	*Eldon Fairley P. O. Box 68 Osceola 72370	John B. Kirkley P. O. Box 1478 Jonesboro 72401	Clay, Craighead, Crittenden, Fulton, Greene, Lawrence, Mississippi, Poinsett, Randolph, and Sharp
2.	*Paul Gray P. O. Box 82 Batesville 72501	John E. Bell 1400 West Pleasure Searcy 72143	Cleburne, Conway, Faulkner, Independence, Izard, Jackson, Stone, and White
3.	Fred C. Inman, Jr. 521 N. Williams Carlisle 72024	*L. J. P. Bell 626 Poplar Helena 72342	Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis, and Woodruff
4.	*Raymond Irwin 1421 Cherry Pine Bluff 71601	John P. Burge 434 S. Cokley Lake Village 71653	Ashley, Chicot, Desha, Drew, Jefferson, and Lincoln
5.	John H. Moore 412 N. Washington El Dorado 71730	*J. B. Jameson, Jr. 110 Harrison, S.W. Camden 71701	Bradley, Calhoun, Cleveland, Columbia, Dallas, Ouachita, and Union
6.	*Karlton H. Kemp 408 Hazel Texarkana 75501	C. Lynn Harris P. O. Box 550 Hope 71801	Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Pike, Polk, and Sevier
7.	Curtis B. Clark 200 S. Rose Sheridan 72150	*Robert F. McCrary 505 West Grand Hot Springs 71901	Clark, Garland, Grant, Hot Spring, Montgomery, and Saline
8.	*W. Payton Kolb Medical Towers Building Little Rock 72205	William S. Orr, Jr. St. Vincent Infirmary Little Rock 72201	Pulaski
9.	Morris M. Henry P. O. Box 1225 Fayetteville 72701	*Henry V. Kirby 651 N. Spring Harrison 72601	Baxter, Benton, Boone, Carroll, Madison, Marion, Newton, Searcy, Van Buren, and Washington
10.	*C. C. Long 110 W. Commercial Ozark 72949	A. S. Koenig 922 Lexington Fort Smith 72901	Crawford, Franklin, Johnson, Logan, Perry, Pope, Scott, Sebastian, and Yell

*Senior Councilor

1974 OFFICERS—COUNTY MEDICAL SOCIETIES—ARKANSAS MEDICAL SOCIETY

ARKANSAS	Pres.—Carl Northcutt, Route 1, Box 21-D, Stuttgart 72160 Secy.—Carl Northcutt, Route 1, Box 21-D, Stuttgart 72160
ASHLEY	Pres.—C. E. Ripley, 317 North Alabama, Crossett 71635 Secy.—J. D. Rankin, P. O. Box 232, Hamburg 71646
BAXTER	Pres.—K. Simon Abraham, 126 West Sixth, Mountain Home 72653 Secy.—Ben N. Saltzman, 126 West Sixth, Mountain Home 72653
BENTON	Pres.—James D. Huskins, 304 South Maxwell, Siloam Springs 72761 Secy.—William F. Webb, P. O. Box 368, Decatur 72722
BOONE	Pres.—Gerald Guyer, 651 North Spring, Harrison 72601 Secy.—Thomas J. Simpson, 651 North Spring, Harrison 72601
BRADLEY	Pres.—Merl Crow, 205 East Church, Warren 71671 Secy.—James W. Marsh, 302 North Main, Warren 71671
CHICOT	Pres.—William J. Weaver, P. O. Box Q, Eudora 71640 Secy.—Howard S. Henjyoji, P. O. Box 512, Lake Village 71653

PROCEEDINGS

CLARK	Pres.—George Peebles, 305 East Main, Gurdon 71743 Secy.—James T. Blackmon, 1008 Pine, Arkadelphia 71923
CLEBURNE	Pres.—W. M. Wells, Fourth and Spring, Heber Springs 72543 Secy.—D. H. McClanahan, 401 West Searcy, Heber Springs 72543
COLUMBIA	Pres.—Joe F. Rnshton, 219 North Washington, Magnolia 71753 Secy.—Robert W. Hunter, Jr., 950 Highland, Magnolia 71753
CONWAY	Pres.—Bill Siddon, P. O. Box 587, Morrilton 72110 Secy.—Thomas L. Buchanan, P. O. Box 667, Morrilton 72110
CRAIGHEAD-POINSETT	Pres.—Don B. Vollman, 411 East Matthews, Jonesboro 72401 Secy.—Phillip M. Utley, 920 South Main, Jonesboro 72401
CRAWFORD	Pres.—L. R. Darden, 104 South Eighth, Van Buren 72956 Secy.—F. E. Shearer, P. O. Box 458, Alma 72921
CRITTENDEN	Pres.—H. G. Lanford, 300 South Rhodes, West Memphis 72301 Secy.—Keith B. Kennedy, P. O. Box 489, West Memphis 72301
CROSS	Pres.—R. D. Bethell, P. O. Box 158, Wynne 72396 Secy.—K. E. Beaton, P. O. Box 158, Wynne 72396
DALLAS	Pres.—H. H. Atkinson, P. O. Box 519, Fordyce 71742 Secy.—Don Howard, P. O. Box 506, Fordyce 71742
DESHA	Pres.—Guy U. Robinson, 207 South Elm, Dumas 71639 Secy.—Howard R. Harris, 207 South Elm, Dumas 71639
DREW	Pres.—J. P. Price, 216 South Main, Monticello 71655 Secy.—Van C. Binns, 201 East Trotter, Monticello 71655
FAULKNER	Pres.—Fred Gordy, 552 Locust, Conway 72032 Secy.—Bob Banister, 923 Parkway, Conway 72032
FRANKLIN	Pres.—C. C. Long, 110 West Commercial, Ozark 72949 Secy.—David L. Gibbons, 506 West Commercial, Ozark 72949
GARLAND	Pres.—Louis R. McFarland, 211 Hobson, Hot Springs 71901 Secy.—Paul Thompson, 101 Whittington, Hot Springs 71901
GRANT	Pres.—Curtis Clark, 200 South Rose, Sheridan 72150 Secy.—Clyde Paulk, 200 South Rose, Sheridan 72150
GREENE-CLAY	Pres.—Larry Lawson, 216 West Court, Paragould 72450 Secy.—George Collier, 130 South 14th, Paragould 72450
HEMPSTEAD	Pres.—C. Lynn Harris, P. O. Box 550, Hope 71801 Secy.—Lowell O. Harris, P. O. Box 550, Hope 71801
HOT SPRING	Pres.—John Cole, 725 East Page, Malvern 72104 Secy.—John D. Wise, 1219 South Main, Malvern 72104
HOWARD-PIKE	Pres.—M. H. Wilmoth, 1400 Leslie, Nashville 71852 Secy.—M. H. Wilmoth, 1400 Leslie, Nashville 71852
INDEPENDENCE	Pres.—Paul Gray, P. O. Box 82, Batesville 72501 Secy.—Jim E. Lytle, 181 South Broad, Batesville 72501
JACKSON	Pres.—Jerry M. Frankum, Jr., Second & Laurel, Newport 72112 Secy.—John D. Ashley, Jr., Second & Laurel, Newport 72112
JEFFERSON	Pres.—George V. Roberson, 1708 Doctors Drive, Pine Bluff 71601 Secy.—Y. Y. King, 1008 West 11th, Pine Bluff 71601
JOHNSON	Pres.—Guy Shrigley, P. O. Box 70, Clarksville 72830 Secy.—Boyce West, P. O. Box 668, Clarksville 72830
LAFAYETTE	Pres.—Willie J. Lee, P. O. Box 276, Stamps 71860 Secy.—Willie J. Lee, P. O. Box 276, Stamps 71860
LAWRENCE	Pres.—Ted Lancaster, 415 Southwest Third, Walnut Ridge 72476 Secy.—J. B. Elders, 321 Southwest Third, Walnut Ridge 72476
LEE	Pres.—Dwight W. Gray, 110 West Chestnut, Marianna 72360 Secy.—E. C. Fields, 77 West Main, Marianna 72360

PROCEEDINGS

LINCOLN	Pres.—J. W. Freeland, P. O. Box 159, Star City 71667 Secy.—R. C. Petty, P. O. Box 580, Star City 71667
LITTLE RIVER	Pres.—James Armstrong, P. O. Box 397, Ashdown 71822 Secy.—Joe G. Shelton, P. O. Box 697, Ashdown 71822
LOGAN	Pres.—Charles Chalfant, 114 West 4th, Booneville 72927 Secy.—James T. Smith, 710 North Express, Paris 72855
LONOKE	Pres.—Doyle Morrison, P. O. Box 993, Cabot 72023 Secy.—B. E. Holmes, 305 West Front, Lonoke 72086
MILLER	Pres.—A. E. Andrews, 315 East 5th, Texarkana 75501 Secy.—Jon D. Hall, 300 East 6th, Texarkana 75501 Exec. Secy.—Mrs. Marilyn Pryor, P. O. Box 1843, Texarkana 75501
MISSISSIPPI	Pres.—Charles C. Brock, Jr., 527 N. 6th, Blytheville 72315 Secy.—Eldon Fairley, P. O. Box 68, Osceola 72370
MONROE	Pres.—Neylon C. David, Jr., 108 West Ash, Brinkley 72021 Secy.—Marvin L. Dalton, 110 South Main, Brinkley 72021
NEVADA	Pres.—H. Blake Crow, 327 East Second, Prescott 71857 Secy.—H. Blake Crow, 327 East Second, Prescott 71857
OUACHITA	Pres.—Oren Colyar, 416 Hospital Drive, Camden 71701 Secy.—L. V. Ozment, 530 Jefferson, S.W., Camden 71701
PHILLIPS	Pres.—L. J. Patrick Bell, 626 Poplar, Helena 72342 Secy.—M. A. McDaniel, 513 Porter, Helena 72342
POLK	Pres.—David P. Hefner, 518 Janssen Avenue, Mena 71953 Secy.—Henry N. Rogers, 600 West 7th, Mena 71953
POPE-YELL	Pres.—Ted E. Ashcraft, 809 West Main, Russellville 72801 Secy.—W. E. King, 3005 West Main Place, Russellville 72801
PULASKI	Pres.—Purcell Smith, Jr., P. O. Box 5675, Little Rock 72205 Secy.—Frank Westerfield, Medical Towers Building, Little Rock 72205 Exec. Secy.—Mr. Paul Harris, 311 Doctors Building, Little Rock 72205
RANDOLPH	Pres.—Thomas B. DeClerk, 204 Thomasville, Pocahontas 72455 Secy.—William W. Scott, P. O. Box 585, Pocahontas 72455
SALINE	Pres.—J. Shelby Duncan, 105 McNeil, Benton 72015 Secy.—Helen Rountree, P. O. Box 370, Benton 72015
SCOTT	Pres.—Harold B. Wright, P. O. Box 249, Waldron 72958 Secy.—Harold B. Wright, P. O. Box 249, Waldron 72958
SEBASTIAN	Pres.—McDonald Poe, 320 North Greenwood, Fort Smith 72901 Secy.—R. C. Goodman, 1500 Dodson, Fort Smith 72901 Asst. Secy.—Mrs. Jackie Boyd, 3101 Hendricks, Fort Smith 72901
SEVIER	Pres.—James I. Balch, Fourth and Heynecker, DeQueen 71832 Secy.—Olie D. Brown, P. O. Box 890, DeQueen 71832 Exec. Secy.—Mr. Walter E. Cox, DeQueen Clinic, Hwy. 70 West, DeQueen 71832
ST. FRANCIS	Pres.—H. H. Hollis, 317 North Washington, Forrest City 72335 Secy.—
UNION	Pres.—George Warren, P. O. Drawer W, Smackover 71762 Secy.—W. G. Elliott, 443 West Oak, El Dorado 71730
VAN BUREN	Pres.—C. G. Pearce, Clinton 72031 Secy.—John A. Hall, 302 East Main, Clinton 72031
WASHINGTON	Pres.—John W. Vinzant, 22 East Spring, Fayetteville 72701 Secy.—Michael Rudko, 908 Rolling Hills, Fayetteville 72701
WHITE	Pres.—William D. White, 2900 Hawkins, Searcy 72143 Secy.—Hugh R. Edwards, 601 Woodruff, Searcy 72143
WOODRUFF	Pres.—B. E. Hendrixson, 306 East Third, McCrory 72101 Secy.—James E. Rowe, 306 East Third, McCrory 72101

COMMITTEES — ARKANSAS MEDICAL SOCIETY — 1974-75

	Term Expires		Term Expires
COMMITTEE ON CANCER CONTROL		SUB-COMMITTEE ON MATERNAL AND CHILD WELFARE	
Gilbert D. Jay, III, 200 South Rhodes, West Memphis 72301	1975	Ewing C. Reed, Jr., 1119 Bishop, Little Rock 72202	1975
Herbert B. Wren, P. O. Box 1109, Texarkana 75501	1976	J. S. McKinney, 209 Thompson, El Dorado 71730	1976
Charles R. Henry, 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1976	Joseph L. Rosenzweig, 236 Woodbine, Hot Springs 71901	1977
David Barclay, 1301 West Markham, Little Rock 72205	1977	E. Stewart Allen, 1100 North University, Little Rock 72205 — <i>CHAIRMAN</i>	1977
John Broadwater, 1500 Dodson, Fort Smith 72901	1977		
COMMITTEE ON MEDICAL LEGISLATION		SUB-COMMITTEE ON TUBERCULOSIS	
Elvin Shuffield, 1000 Wolfe, Little Rock 72202 — <i>CHAIRMAN</i>	1975	Jim Citty, P. O. Box 391, DeQueen 71832	1975
Joe Verser, P. O. Box 106, Harrisburg 72432	1975	Lawrence C. Price, P. O. Box 3006, Fort Smith 72901 — <i>CHAIRMAN</i>	1975
Allie E. Andrews, 315 East 5th, Texarkana 75501	1975	L. J. Pat Bell, 626 Poplar, Helena 72342	1976
Paul L. Rogers, 318 North Greenwood, Fort Smith 72901	1976	Karlton Kemp, 408 Hazel, Texarkana 75501	1976
Martin Eisele, 101 Whittington, Hot Springs 71901	1976	William A. Hudson, Hudsonakers, Jasper 72641	1977
Robert Watson, 750 Medical Towers Building, Little Rock 72205	1976	Joseph H. Bates, 300 E. Roosevelt, Little Rock 72206	1977
Morris Henry, P. O. Box 1225, Fayetteville 72701	1977		
Neil E. Compton, P. O. Box 209, Bentonville 72712	1977	COMMITTEE ON AGING	
Donald Browning, 409 North University, Little Rock 72205	1977	Woodbridge Morris, 5326 West Markham, Little Rock 72205	1975
		Gordon P. Oates, 1612 Maryland, Little Rock 72202 — <i>CHAIRMAN</i>	1976
SUB-COMMITTEE ON NATIONAL LEGISLATION		Bill D. Stewart, 115 North University, Little Rock 72205	1976
George W. Jackson, 4313 West Markham, Little Rock 72205	1975	Thomas E. Burrow, 903 West Grand, Hot Springs 71901	1976
G. Thomas Jansen, 500 South University, Little Rock 72205	1975	John F. Guenther, 126 West 6th, Mountain Home 72653	1977
William S. Orr, Jr., St. Vincent Infirmary, Little Rock 72201 — <i>CHAIRMAN</i>	1976	Friedman Sisco, P. O. Box 65, Springdale 72764	1977
Morris Henry, P. O. Box 1225, Fayetteville 72701	1976		
Jacob P. Ellis, 714 West Faulkner, El Dorado 71730	1977	SUB-COMMITTEE ON PHYSICAL FITNESS AND SCHOOL HEALTH	
Dale Alford, 5700 West Markham, Little Rock 72205	1977	Francis Buchanan, 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1975
		Coy C. Kaylor, 1673 North College, Fayetteville 72701	1976
COMMITTEE ON PUBLIC HEALTH		James Sanders, 505 East Matthews, Jonesboro 72401	1976
Donald B. Baker, 241 West Spring, Fayetteville 72701	1975	Ralph Ingram, 1120 Lexington, Fort Smith 72901	1976
Thomas D. Honeycutt, 4124 West 11th, Little Rock 72201	1975	J. A. Harrel, Jr., Route 5, Box 615A, Little Rock 72207	1977
Ben N. Saltzman, 126 West Sixth, Mountain Home 72653 — <i>CHAIRMAN</i>	1976	Kemal Kutait, 1120 Lexington, Fort Smith 72901	1977
Bryant S. Swindoll, 4815 West Markham, Little Rock 72205	1976		
E. J. Easley, 4815 West Markham, Little Rock 72205	1977	SUB-COMMITTEE ON INDUSTRIAL HEALTH	
Milton D. Deneke, P. O. Box 607, West Memphis 72301	1977	I. Leighton Millard, P. O. Box 5270, Little Rock 72205	1975
C. Lewis Hyatt, 515 North Main, Monticello 71655	1977	Howard Schwander, 1115 Bishop, Little Rock 72207	1975
		Paul G. Henley, 700 West Faulkner, El Dorado 71730	1976

	Term Expires		Term Expires
H. Blake Crow, 327 East Second, Prescott 71857	1976	Thomas M. Durham, Jr., 505 West Grand, Hot Springs 71901	1975
Noel Ferguson, 651 North Spring, Harrison 72601	1977	John P. Wood, 907 Mena, Mena 71953 — <i>CHAIRMAN</i>	1976
Gwyn Atnip, 1111 West 15th, Pine Bluff 71601	1977	H. King Wade, Jr., 231 Central, Hot Springs 71901	1976
COMMITTEE ON MENTAL HEALTH		Robert Miller, 616 Elm Street, Helena 72342	1977
Robert G. Carnahan, 4313 West Markham, Little Rock 72205	1975	Ashley S. Ross, 500 South University, Little Rock 72205	1977
W. Payton Kolb, Medical Towers Building, Little Rock 72205 — <i>CHAIRMAN</i>	1975	Jean Gladden, P. O. Box 1118, Harrison 72601	1977
Walter R. Oglesby, 324 West Pershing, North Little Rock 72114	1975	COMMITTEE ON MEDICAL EDUCATION	
William O. Young, 135 Evergreen Place, Little Rock 72207	1976	Marlin B. Hoge, 314 North Greenwood, Fort Smith 72901, Dist. 10	1975
James M. Robinette, 923 Union, Jonesboro 72401	1976	Robert D. Dickins, Jr., 750 Medical Towers, Little Rock 72205, Dist. 8	1975
Albert Clowney, 312 Thompson, El Dorado 71730	1976	Lynn Harris, P. O. Box 550, Hope 71801, Dist. 6	1975
Henry Hearnberger, 4313 West Markham, Little Rock 72205	1977	Jacob Ellis, 714 West Faulkner, El Dorado 71730, Dist. 5	1976
Amail Chudy, 1801 Maple, North Little Rock 72114	1977	Lee B. Parker, Jr., 241 West Spring, Fayetteville 72701, Dist. 9 — <i>CHAIRMAN</i>	1976
IMMUNIZATION SUB-COMMITTEE		Bobby McKee, 505 East Matthews, Jonesboro 72401, Dist. 1	1976
T. E. Townsend, 1420 West 43rd, Pine Bluff 71601 — <i>CHAIRMAN</i>	1975	Bernard Capes, P. O. Box 2398, West Helena 72390, Dist. 3	1976
Mahlon Maris, P. O. Box 759, Harrison 72601	1975	Raymond V. Biondo, 406 West 26th, North Little Rock 72114, Dist. 8	1977
Betty A. Lowe, 300 East Sixth, Texarkana 75501	1975	C. Lewis Hyatt, 515 North Main, Monticello 71655, Dist. 4	1977
Calvin Austin, 1210 DeQueen, Mena 71953	1975	Robert H. White, 1004 Dyer, Malvern 72104, Dist. 7	1977
Vida H. Gordon, 4301 West Markham, Little Rock 72205	1976	W. M. Wells, Fourth and Spring, Heber Springs 72543, Dist. 2	1977
Charles E. Kemp, 809 Cobb, Jonesboro 72401	1976	COMMITTEE ON HOSPITALS	
Guy U. Robinson, 207 S. Elm, Dumas 71639	1977	Paul N. Means, 3 Hearthside Drive, Little Rock 72207	1975
SUB-COMMITTEE ON TRAFFIC SAFETY		Peter J. Irwin, 1500 Dodson, Fort Smith 72901	1975
James G. Stuckey, Jr., 500 South University, Little Rock 72205	1975	Art B. Martin, 1500 Dodson, Fort Smith 72901 — <i>CHAIRMAN</i>	1976
H. Austin Grimes, P. O. Box 5270, Little Rock 72205	1975	George K. Mitchell, P. O. Box 2181, Little Rock 72203	1976
Donald L. Duncan, P. O. Box 778, Texarkana 75501	1975	George W. Warren, Box W, Smackover 71762	1977
Louise M. Henry, P. O. Box 1267, Fayetteville 72701	1975	Raymond A. Irwin, Jr., 1421 Cherry, Pine Bluff 71601	1977
Carl L. Williams, 522 South 16th, Fort Smith 72901 — <i>CHAIRMAN</i>	1976	COMMITTEE ON PUBLIC RELATIONS	
John P. Burge, Lake Village Clinic, Lake Village 71653	1976	A. C. Bradford, Waldron Road at Ellsworth, Fort Smith 72901	1975
Guy U. Robinson, 207 South Elm, Dumas 71639	1977	W. Ray Jouett, 750 Medical Towers Building, Little Rock 72205	1975
SUB-COMMITTEE ON LIAISON WITH VOCATIONAL REHABILITATION		G. Thomas Jansen, 500 South University, Little Rock 72205	1976
Samuel B. Thompson, 5520 West Markham, Little Rock 72205	1975	Milton Deneke, P. O. Box 607, West Memphis 72301	1976

PROCEEDINGS

	Term Expires		Term Expires
Joseph A. Norton, 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1977	Warren Murry, 1749 North College, Fayetteville 72701 — <i>CHAIRMAN</i>	1977
Nathan L. Poff, 401 West Searcy, Heber Springs 72513	1977	COMMITTEE ON INSURANCE	
SUB-COMMITTEE ON LIAISON WITH THE AUXILIARY		J. Harry Hayes, Jr., 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1975
George Roberson, 1708 Doctors Drive, Pine Bluff 71601 — <i>CHAIRMAN</i>	1975	Paul H. Millar, Jr., Route 1, Box 21-D, Stuttgart 72160	1975
T. E. Townsend, 1420 West 43rd, Pine Bluff 71601	1975	John D. Wright, 321 Short Street, Benton 72015	1976
Donald L. Duncan, P. O. Box 778, Texarkana 75501	1975	James R. Weber, P. O. Box 188, Jacksonville 72076	1976
Lawrence C. Price, P. O. Box 3006, Fort Smith 72901	1975	Charles F. Wilkins, 3005 West Main Place, Russellville 72801	1977
Paul J. Cornell, 500 South University, Little Rock 72205	1975	Dale Briggs, 1210 Look Street, Little Rock 72204	1977
Jack Edmisten, P. O. Box 1108, Fayetteville 72701	1975	COMMITTEE ON MEDICINE AND RELIGION	
SUB-COMMITTEE ON STATE HEALTH AND MEDICAL RESOURCES FOR CIVIL DEFENSE		C. Randolph Ellis, 1004 South Main, Malvern 72101	1975
Alvin Strauss, Jr., 110 East Seventh, Little Rock 72201	1975	Kenneth Lilly, 1120 Lexington, Fort Smith 72901 — <i>CHAIRMAN</i>	1975
Hugh R. Edwards, 601 Woodruff, Searcy 72143	1976	Calvin Austin, 1210 DeQueen, Mena 71953	1976
James T. Blackmon, 1008 Pine, Arkadelphia 71923	1977	Carl E. Wenger, 1624 Maryland, Little Rock 72202	1976
Monroe D. McClain, 1419 North Hughes, Little Rock 72207	1977	Jasper McPhail, 1120 Marshall, Little Rock 72202	1977
Robert L. Kerr, P. O. Box 432, Mountain Home 72653	1977	Fred O. Henker, 4301 West Markham, Little Rock 72205	1977
Ralph R. Wooley, P. O. Box 7267, Pine Bluff 71601 — <i>CHAIRMAN</i>	1977	COMMITTEE ON ARRANGEMENTS FOR ANNUAL SESSION	
J. A. Harrel, Jr., 4815 West Markham, Little Rock 72205	1977	A. S. Koenig, 922 Lexington, Fort Smith 72901	1975
ADVISORY COMMITTEE TO THE MEDICAL ASSISTANTS SOCIETY		Dwight W. Gray, 110 West Chestnut, Marianna 72360	1975
G. Grimsley Graham, 5326 West Markham, Little Rock 72205	1975	G. Thomas Jansen, 500 South University, Little Rock 72205	1975
W. C. Holmes, Jr., Waldron Road at Ellsworth, Fort Smith 72901	1975	Winston K. Shorey, 4301 West Markham, Little Rock 72205	1976
John L. Dedman, Jr., 415 Hospital Drive, S.W., Camden 71701	1976	Gilbert S. Campbell, 4301 West Markham, Little Rock 72205	1976
W. Y. Springer, 236 Central, Hot Springs 71901 — <i>CHAIRMAN</i>	1977	W. T. Dungan, 4301 West Markham, Little Rock 72205	1976
L. K. Austin, 6213 Lee, Little Rock 72205	1977	Robert F. McCrary, 505 West Grand, Hot Springs 71901 — <i>CHAIRMAN</i>	1977
Wayne G. Elliott, 443 West Oak Street, El Dorado 71730	1977	Frank M. Burton, 101 Whittington, Hot Springs 71901	1977
COMMITTEE ON VETERANS ADMINISTRATION AFFAIRS		George H. Collier, Jr., 901 West Kingshighway, Paragould 72450	1977
Joseph W. Ledbetter, 804 South Church, Jonesboro 72401	1976	Charles A. Taylor, 181 South Broad Street, Batesville 72501	1977
Chalmers S. Pool, VA Hospital, North Little Rock 72114	1977	COUNCIL COMMITTEES	
J. W. Kennedy, 300 East Roosevelt, Little Rock 72206	1977	PHYSICIAN-NURSE JOINT PRACTICE COMMITTEE	
John W. Dorman, 1203 Sunset, Springdale 72764	1977	J. R. Pierce, Jr., 1712 West 42nd, Pine Bluff 71601	
		Morris M. Henry, P. O. Box 1225, Fayetteville 72701	

Robert F. McCrary, 505 West Grand,
Hot Springs 71901 — *CHAIRMAN*
Charles E. Tommey, 412 North Washington,
El Dorado 71730
Jerry Holton, 318 North Greenwood,
Fort Smith 72901
Guy R. Farris, 6213 Lee,
Little Rock 72205

COMMITTEE ON CONSTITUTIONAL REVISION

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Fayetteville 72701 — *CHAIRMAN*
J. Harry Hayes, Jr., 500 South University,
Little Rock 72205
Paul L. Rogers, 318 North Greenwood,
Fort Smith 72901
H. King Wade, Jr., 231 Central,
Hot Springs 71901
Ross E. Maynard, 303 National Building,
Pine Bluff 71601

BUDGET COMMITTEE

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Ozark 72949
H. W. Thomas, 105 North Freeman,
Dermott 71638 — *CHAIRMAN*
K. R. Duzan, 443 West Oak,
El Dorado 71730

SENIOR MEDICAL DAY COMMITTEE

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Little Rock 72205 — *CHAIRMAN*
Calvin R. Simmons, 1714 West 42nd,
Pine Bluff 71601

LIAISON COMMITTEE WITH STATE WELFARE DEPARTMENT (Composed of Executive Committee)

PHYSICIAN TO WORK WITH AMA COMMITTEE ON QUACKERY

Frank M. Burton, 101 Whittington,
Hot Springs 71901

COMMITTEE ON PHARMACY

Willie R. Harris, 520 Northeast Fourth,
England 72046 — *CHAIRMAN*
Art B. Martin, 1500 Dodson,
Fort Smith 72901

ARKANSAS STATE ADVISORY COMMITTEE TO THE SELECTIVE SERVICE SYSTEM

Joseph W. Ledbetter, 804 South Church,
Jonesboro 72401
T. S. Van Dryn, P. O. Box 110,
Stuttgart 72160
Allen R. Russell, 12 Southern Pines Drive,
Pine Bluff 71601
James F. Clark, 524 West Faulkner,
El Dorado 71730
Frank M. Burton, 101 Whittington,
Hot Springs 71901

Robert A. Calcote, 218 Donaghey Building,
Little Rock 72201
Ulys Jackson, 118 South Pine,
Harrison 72601
Friedman Sisco, P. O. Box 65,
Springdale 72764
L. A. Whittaker, Jr., 708 Lexington,
Fort Smith 72901 — *CHAIRMAN*

STUDENT AMA LIAISON COMMITTEE

Alfred Kahn, Jr., 1300 West Sixth,
Little Rock 72201 — *CHAIRMAN*
Elvin Shuffield, 1000 Wolfe,
Little Rock 72202
Thomas D. Honeycutt, 4124 West 11th,
Little Rock 72204

COMMITTEE ON EMERGENCY HEALTH SERVICES

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Ben N. Saltzman, 126 West Sixth,
Mountain Home 72653
J. Warren Murry, 1749 North College,
Fayetteville 72701
Art B. Martin, 1500 Dodson,
Fort Smith 72901
John P. Wood, 907 Mena,
Mena 71953

MEDICAL SCHOOL COMMITTEE

Ross Fowler, 215 West Stephenson,
Harrison 72601 — *CHAIRMAN*
Asa A. Crow, 320 South Tenth,
Paragould 72450
H. W. Thomas, 105 North Freeman,
Dermott 71638
C. Lewis Hyatt, 515 North Main,
Monticello 71655
Kemal Kutait, 1120 Lexington,
Fort Smith 72901



Officers of the Woman's Auxiliary for 1974-75 left to right, Mrs. Herbert Wren, Texarkana, Southwest Regional Vice President; Mrs. Wade Burnside, Fayetteville, Northwest Regional Vice President; Mrs. George Roberson, Pine Bluff, President; Mrs. Curry Bradburn, Little Rock, President-elect; Mrs. Walter Mizell, Benton, Treasurer; and Mrs. Richard Martin, Paragould, Northeast Regional Vice President.



MRS. GEORGE ROBERSON

PINE BLUFF

1974-75 PRESIDENT

WOMAN'S AUXILIARY TO THE
ARKANSAS MEDICAL SOCIETY

MEDICAL SERVICES REVIEW COMMITTEE

Term Expires April 30	Committee Members (Name and Address)	Specialty Represented
1976	Kemal Kutait, 1120 Lexington, Fort Smith 72901	Fam. Pr.
1976	Guy U. Robinson, 207 South Elm, Dumas 71639	Fam. Pr.
1975	Ross Fowler, 215 West Stephenson, Harrison 72601	Fam. Pr.
1976	Monroe B. Painter, 675 Lollar Lane, Fayetteville 72701	Int. Med.
1975	W. Sexton Lewis, Medical Towers Building, Little Rock 72205	Int. Med.
1977	Donald L. Duncan, P. O. Box 778, Texarkana 75501	Surgery
1975	Henry Hollenberg, 500 South University, Little Rock 72205	Surgery
1976	C. E. Tommey, 412 North Washington, El Dorado 71730	Surgery
1977	Edwin Whiteside, P. O. Box 1208, Fayetteville 72701	Allergy
1976	Paul Means, 3 Hearthside Drive, Little Rock 72207	Anes.
1977	Charles M. Davis, 1708 West 42nd Avenue, Pine Bluff 71601	Derm.
1977	Philip J. Deer, Jr., 601 Scott, Little Rock 72201	Oph.
1977	Ellery Gay, Jr., Medical Towers Building, Little Rock 72205	Oto.
1975	Robert F. McCrary, 505 West Grand, Hot Springs 71901	Ob-Gyn
1976	Ray Jouett, Medical Towers Building, Little Rock 72205	Neurosurgery
1976	Fred D. Jarvis, Jr., 1031 North College, Fayetteville 72701	Psychiatry
1975	Lloyd R. Warford, 6213 Lee Avenue, Little Rock 72205	Pediatrics
1977	Robert E. Elliott, 1400 West Pleasure, Searcy 72143	Radiology
1975	R. A. Burger, 1700 West 13th Street, Little Rock 72201	Pathology
1975	Kenneth Jones, P. O. Box 5270, Little Rock 72205	Orthopedics
1976	Charles W. Logan, 500 South University, Little Rock 72205	Urology
—	Charles F. Wilkins, Jr., 3005 West Main Place, Russellville 72801	(Chairman)
—	Ben N. Saltzman, 126 West 6th, Mountain Home 72653	(President)
—	T. E. Townsend, 1420 West 43rd, Pine Bluff 71601	(President-elect)
—	Elvin Shuffield, 1000 Wolfe, Little Rock 72202	(Secretary)
—	C. C. Long, 110 West Commercial, Ozark 72949	(Council Chairman)

MEDICAL SERVICES REVIEW COMMITTEE

Sub-Committee of Sub-Specialties

(Representatives on call to meet with Committee as needed when claims in specialty field are considered)

Sub-Committee Representative (Name and Address)	Sub-Specialty Represented
Carl L. Williams, 522 South 16th, Fort Smith 72901	Thoracic Surgery
T. J. Smith, 409 North University, Little Rock 72205	Gastroenterology
Thomas H. Allen, 413 North University, Little Rock 72205	Plastic Surgery
John C. Schultz, 900 North University, Little Rock 72207	Pulmonary Diseases
Kelsy Caplinger, III, P. O. Box 5675, Little Rock 72205	Pediatric Allergy
W. R. Johnson, Jr., D.D.S., 404 Med. Arts Bldg., Hot Springs 71901	Oral Surgery

MINUTES — BOARD OF DIRECTORS

ARKANSAS FOUNDATION FOR MEDICAL CARE

APRIL 21, 1974

Chairman Long called the meeting to order and the invocation was by W. Payton Kolb.

Those in attendance were: Board members Kirby, Gray, Burge, McCrary, Long, Kolb, Kemp, Harris, Orr, Duzan, J. Bell, and guests Shuffield, Wood, Mr. Steve O'Donnell, Mr. Warren, Mr. Schaefer, and Miss Richmond.

Chairman Long reviewed the Board action regarding Professional Standards Review Organization developments and introduced Mr. Steve O'Donnell of American Health Systems. Mr. O'Donnell discussed the proposal which his firm had prepared for the Foundation's application for a "planning contract" with the Office for Professional Standards Review. The proposal was presented in two parts: (1) Technical, and (2) Business.

The Board voted, upon motion of Orr and Kemp, to approve the Technical proposal as amended to include a medical director and to provide for the program director to report to the Executive Vice President rather than directly to the Board.

A modified business proposal was submitted to incorporate the Board's recommendation on the medical director. The Board further voted to amend the proposal to provide payment of \$50 an hour for the services of the medical director. Upon motion of Orr and Bell, the Board approved submission of a business pro-

posal calling for a budget of approximately \$91,000.

Dr. Robert McCrary, Chairman of the Review Committee, discussed the activities of his committee, and requested an opinion of the Board regarding the charge for review of cases. The Committee had initially set a fee of \$100 per case reviewed and payment was made in that amount by a number of insurance companies. Because of protests received from the insurance companies, however, the Committee voted to lower the minimum review fee to \$35, provided that the fee would be on a sliding scale with the fee determined by amount of time and effort required, and provided that no case involving less than \$250 would be considered. Upon motion of Orr, the Board voted to refund the \$65 per case to the insurance companies who had paid the \$100 fee. The Board requested that Dr. McCrary discuss with his committee members the question of payment to the review committee for services and report to the Board at its May 1 meeting.

MAY 1, 1974

The Arkansas Foundation for Medical Care met at 11:30 A.M. on Wednesday, May 1, 1974, in the Camelot Inn, Little Rock, with President C. C. Long presiding.

President Long advised the membership that there would be no election at this meeting, inasmuch as it had been agreed at the February meeting that those board members and officers elected at that time would serve until 1975.

President Long then advised the membership

that the Board had approved submission of a proposal to the Department of Health, Education and Welfare for a planning grant for Professional Standards Review. The planning grant would be for a six-month period from July to December 1974. The Professional Standards Review Organization would not become operational until the Foundation is conditionally designated a PSRO—after the six-month period of the planning grant.

Dr. Long then advised that there were several items for consideration of the Board:

1. He reminded the Board that the officers had appointed a Review Committee to serve for one year. The committee was composed of Robert McCrary, Chairman; Rhys Williams, H. Austin Grimes, Kemal Kutait, and W. Sexton Lewis. The Board voted to reappoint the committee for another term.
2. The Chairman of the Review Committee, Robert McCrary, then reported that it was the feeling of the committee members that payment should be made at the rate of \$30 per hour and 12¢ per mile for review committee meetings. This recommendation was approved by the Board.
3. Dr. McCrary further reported that the Committee voted to recommend that the review fee be revised to \$150 per case so that the review charge would cover costs of staff, etc. Upon motion of Koenig, the Board voted to approve the Committee's recommendation that the fee be set at \$150.

The meeting adjourned at 12:00 noon.



The Diagnosis of Acoustic and Other Cerebellopontine Angle Tumors**

Michael E. Glasscock, III, M.D., F.A.C.S.*

The early detection of acoustic and other cerebellopontine angle tumors has reached a new state of the art. There are several pitfalls, however, that can make the diagnosis confusing and sometimes difficult. The purpose of this paper is to review briefly, the history of acoustic neuroma diagnosis, the customary steps in the neuro-otologic evaluation of the tumor suspect and to present interesting cases that demonstrate unusual and challenging diagnostic problems.

HISTORICAL ASPECTS

Harvey Cushing was the first to recognize the symptoms of tinnitus and hearing loss in patients with acoustic tumors. In his 1917 Monograph¹ he described the case histories of thirty patients with neuromas. These tumors were so large by the time he operated on them that he had to perform a subtotal removal to keep the mortality rate down to twenty percent.

At this point in medical history the audiometer had not been invented, Barany's vestibular work was not well known and x-ray examination of the temporal bone was not sophisticated enough to determine an enlargement of the internal auditory canal.

By 1934 Dandy was advocating a unilateral approach. He could do this because he knew which side the tumor was on. He was also diagnosing the tumors at a much earlier stage. By this time x-ray examination of the temporal bone and vestibular testing were more popular. Audiometric studies were in their infancy, but a gross sensorineural hearing loss could be determined.

In the next twenty years the quality of x-rays improved, audiometric and vestibular testing became more sophisticated and the diagnosis of an acoustic neuroma was generally made at a much earlier stage. With surgical techniques popular at this time, however, few neurosurgeons would operate on an early neuroma. This general attitude prevailed for many years, thereby discouraging early diagnosis.

By the 1960's William House had become in-

terested in the translabyrinthine approach to acoustic tumors² and the emphasis shifted to early detection and removal. New diagnostic aids such as the polytome machine became widely used. With the use of contrast studies in the cerebellopontine angle, there were less negative surgical explorations and the approximate size of the tumor could be determined preoperatively. In the last few years electronystagmography (ENG) has become popular for vestibular testing and audiometry has become sophisticated. It is now possible for the astute physician to diagnose an acoustic neuroma when it is three to five millimeters in size. Such a tumor can be removed through the middle fossa with preservation of the facial nerve and in most cases, hearing.

DIAGNOSIS

A minimal investigation should include a history and physical; screening neurological, audiometric, and vestibular studies; and x-rays of the petrous pyramid. If these studies are suggestive of a tumor, a posterior fossa myelogram should be performed.

Taking all these things into consideration, there are still certain cases that will be confusing and difficult to diagnose. The astute physician must be aware of the more common pitfalls that may lull him into a false sense of security.

The full neuro-otologic evaluation has been reported in detail elsewhere^{3,4} therefore, only a brief summary of the diagnostic steps will be presented here.

History: Patients with cerebellopontine angle tumors do not necessarily present with a classic history. The astute physician will realize that there are a variety of symptoms associated with these tumors. He must be willing to perform a thorough evaluation based upon minimal symptoms.

Physical Examination: This should consist of a routine head and neck examination in which the ears, nose, larynx, nasopharynx and hypopharynx are carefully evaluated.

Neurologic Evaluation: All cranial nerves should be tested and this can be easily incorporated into the head and neck examination. In

*Assistant Clinical Professor of Surgery (Otology and Neuro-Otology) Vanderbilt University, Nashville, Tennessee. Sponsored by the E.A.R. Foundation, Nashville, Tennessee.

**Presented to the Ear, Nose and Throat Section, Arkansas Medical Society, April 1973, Hot Springs, Arkansas.

addition, a quick check of cerebellar function should be performed (Romberg and finger to nose).

Audiometric Evaluation: Every patient complaining of a hearing or balance problem should have as a minimum, a pure tone air and bone conduction audiogram with speech discrimination scores. If there is a unilateral sensorineural hearing loss or the speech discrimination is reduced in one ear, special studies should be performed. The tone decay test and SISI scores are helpful and the Bekesy audiometer is of value.

Vestibular Evaluation: The most reliable and practical vestibular study is the ice water caloric. There are several popular methods. The response will be either present, reduced or absent. Electronystagmography (ENG) has the advantage of providing a permanent record of the response and is helpful in detecting spontaneous and positional nystagmus.

X-ray Evaluation: The diagnosis is dependent upon reliable x-ray studies of the temporal bone and cerebellopontine angle.

Petrous Pyramid Study: These views should be made on a special head unit such as the Franklin or Compere. The usual views obtained are the transorbital, Town's base and Stenver's.

Polytomes: Occasionally the internal auditory canal will be obscured by a large petrous air cell making it extremely difficult to evaluate on routine films. The polytome has the advantage of being able to visualize the area very clearly.

Pantopaque Study: In the majority of the cases a well performed posterior fossa myelogram will establish the presence of a filling defect in the cerebellopontine angle. This is usually performed with a regular tilt table x-ray machine under fluoroscopic guidance using from one to eight cubic centimeters of pantopaque.

Pneumoencephalogram: Occasionally, the pantopaque study will be equivocal or impossible to perform. In such a case the pneumoencephalogram may be of value. It is not suggested as a routine.

Arteriogram: Seldom is a vertebral arteriogram necessary in the diagnosis of angle tumors. It is a valuable part of our armamentarium, however, and is of particular significance if the tumor is a meningioma.

Brain Scan: Small tumors are not visualized

on routine brain scans. Meningiomas and larger acoustics are, and if the results of the other diagnostic studies are confusing the scan may be of definite value.

CASE REPORTS

These case reports were selected because they demonstrate one or more of the common pitfalls associated with the diagnosis of cerebellopontine angle tumors. The summaries are brief and only pertinent information relating to the neurotologic evaluation are presented. All hearing tests are reported in ISO '64 values.

Case 1: This 63-year-old female had a history of bilateral chronic ear disease for thirty years duration. Six years previously she had undergone a tympanoplasty procedure that resulted in a dead ear on the left. There was a 50dB conductive hearing loss in the right ear with 85% speech discrimination. The left tympanic membrane was intact but scarred and there was a posterior superior retraction pocket in the right ear. Her otolaryngologist obtained a routine mastoid series and noticed that the left internal auditory canal was slightly enlarged and flared in appearance. He performed an ice water caloric on the left ear and elicited a good response. Being concerned about the x-ray findings, he referred the patient for further evaluation. Polytome x-rays confirmed the enlargement of the internal auditory canal on the left and a subsequent posterior fossa myelogram revealed a one centimeter filling defect. At surgery a one centimeter acoustic tumor was removed.

Comment: This was truly an asymptomatic tumor. The referring otolaryngologist questioned if he should even be concerned in view of the long history, normal caloric and just suggestive x-rays. There was certainly ample reason to account for the patient's dead ear and from the history it would appear that the acoustic tumor was not the cause of the hearing loss. There are two points that should be made concerning this case.

First, routine x-ray views of the temporal bone should be an integral part of the evaluation on any patient with cochlear or vestibular symptoms. Secondly, suggestive x-ray findings should be investigated thoroughly even in the patient with an obvious explanation for his hearing loss.

A similar case involved a 58-year-old man with a long history of hearing loss in one ear

dating back to his World War II army days. Routine hearing tests revealed a bilateral sensorineural hearing loss, slightly worse in the right ear. There were no symptoms of tinnitus or unsteadiness. Routine evaluation revealed an enlarged internal auditory canal on petrous pyramid x-rays and subsequently a one centimeter acoustic tumor was removed.

Case 2: A 52-year-old woman went to her otolaryngologist because of a bilateral progressive hearing loss. She had bilateral tinnitus and some mild unsteadiness. The routine hearing test revealed a bilateral and symmetrical hearing loss at about 40dB with 95% discrimination in the left and 30% in the right. Bekesy was a type III in the right ear and the SISI score was 0%. Caloric at that time showed a decreased response in the right ear. X-rays of the petrous pyramid were normal. Because of the marked discrimination difference the referring otolaryngologist had the patient seen by a neurosurgeon and a posterior fossa myelogram was attempted. The study was unsatisfactory and no diagnosis was made. The neurosurgeon did not feel the patient had a tumor. Her physician remained suspicious, however, and referred her for further evaluation. Repeat x-rays including polytomes were normal. A posterior fossa myelogram was attempted but due to arachnoiditis the dye would not enter either cerebellopontine angle. At this point we were discouraged and were not sure ourselves whether this patient had a tumor. A brain scan was performed and showed some increased activity in the right temple. A pneumoencephalogram revealed a filling defect. Based upon these two studies, a translabyrinthine approach to the right cerebellopontine angle revealed a four centimeter meningioma.

Comment: This patient was a difficult diagnostic problem. Her hearing test and vestibular examination were both suggestive of a retro-cochlear lesion but the x-rays were normal. The pantopaque study was unsatisfactory and had her otolaryngologist not been highly suspicious and pushed for a diagnosis the tumor would have grown considerably before detection. This case points up the value of the brain scan and pneumoencephalogram. While not often used, they do have their place. Had this been a smaller tumor neither of these studies would have been positive. A similar case involved a

36-year-old woman with normal hearing for pure tones with 95% discrimination in one ear and 70% in the other. Bekesy was type I, caloric response and x-rays were normal. A posterior fossa myelogram was performed on the basis of the discrimination score and a four centimeter filling defect was noted. A meningioma on the inferior lip of the porous acousticus was found at surgery.

Case 3: While in the military service, this 25-year-old male noticed a slight hearing loss in his left ear. He had experienced no tinnitus or unsteadiness. He was seen by an otolaryngologist who performed a standard neuro-otologic evaluation. Hearing test revealed a loss at four and eight thousand Hertz in the left ear with 96% discrimination in both ears. Special studies were normal. Calorics were normal at that time but the petrous pyramid x-rays showed an enlargement of the left internal auditory canal. A subsequent pantopaque study showed a small intracanalicular filling defect. While the otolaryngologist felt this man had a small tumor, he had difficulty convincing any of his colleagues. The man was returned to active duty and subsequently discharged from military service. Two years after the initial evaluation he went to see an otolaryngologist and told him he had an acoustic tumor in his left ear. The hearing was unchanged, the caloric was not absent on the left and petrous pyramid x-rays still revealed an enlarged internal auditory canal. A posterior fossa myelogram was performed and a two centimeter filling defect was found in the left cerebellopontine angle. Surgical removal of an acoustic tumor confirmed the diagnosis.

Comment: This man had his tumor diagnosed when it was confined to the internal auditory canal and his only symptom was a slight hearing loss of four and eight thousand Hertz. While this tumor was removed when it was still relatively small, the ideal time to have performed the surgery would have been when it was first detected. The point we would like to make with this case is, even in the face of minimal symptoms, positive x-ray findings warrant an exploration of the internal auditory canal. In this case the middle fossa route would have been the one of choice.

DISCUSSION

An acoustic tumor arising in the internal

auditory canal or cerebellopontine angle will at one time or another affect the eighth cranial nerve and/or the blood supply to the inner ear. The patient's presenting symptoms depend upon these two factors. If the tumor exerts direct pressure on the nerve fibers themselves, there will be a slow progressive deterioration of hearing and balance function. The loss of vestibular response may be so slow as to produce no symptoms whatsoever, the good ear having ample time to compensate.

When the tumor affects the blood supply to the inner ear the symptoms are more likely to be associated with fluctuating or sudden hearing loss and episodic vertigo. Position, rather than size of a tumor may account for its early symptoms. Should the tumor arise in the internal auditory canal or should it affect the blood supply to the inner ear, one might expect to see early involvement of hearing and balance function. The tumor, therefore, might be detected when it was quite small. In the cerebellopontine angle a tumor might attain great proportions, however, before it affected either the eighth nerve or vasculature of the labyrinthine structures.

This is one reason these tumors (particularly meningiomas) are so incidious. In fact, when one sees a hearing loss with marked discrimination drop and normal x-rays of the internal auditory canal he must be highly suspicious of a meningioma.

While the vestibular response is most often reduced or absent with these tumors, it is not uncommon to see an individual with a normal caloric.

X-ray findings will likewise depend upon where the tumor arises. An acoustic that takes its origin in the internal auditory canal will probably show early x-ray changes. A meningioma, on the other hand, may become quite large and fill the cerebellopontine angle without causing any changes in the x-ray. Normal petrous pyramid x-rays, therefore, do not rule out a cerebellopontine angle tumor. A common pitfall in the x-ray diagnosis of these lesions is unsatisfactory films. In the author's experience it has been extremely helpful to seek the aid of one interested radiologist and encourage him to become proficient in this very specialized area. In this manner he becomes a member of the team

and takes more pride in his studies. This need for perfection holds over into posterior fossa studies as well. An unsatisfactory or undiagnostic angle myelogram may be more confusing than helpful.

Taking all these factor into consideration it becomes quite obvious that these tumors may present with a variety of symptoms. Audiometric, vestibular and x-ray findings are going to vary a great deal. Therefore, it is important to establish a routine series of studies and to perform these on all patients presenting with unilateral sensorineural hearing loss (including discrimination drops) or any type of inner ear problem. It is a temptation, for instance, to make the diagnosis of an obvious Meniere's disease or sudden vascular hearing loss and not obtain x-rays of the petrous pyramid. Failure to perform routine studies in this manner accounts for many undiagnosed tumors.

By history there may be ample explanation for a unilateral hearing loss such as measles or chronic ear disease. This should be no deterrent to a thorough evaluation. Physical and neurologic findings may be confusing and misleading. With experience these pitfalls can be overcome. Above all, the astute physician must be prepared to use all the diagnostic tools available to him. These may include pneumoencephalograms, brain scans, or arteriograms. The Silverstein⁵ test for inner ear proteins has been shown to have a high index of accuracy in detecting acoustic tumors. It is of particular value in a patient who is allergic to iodine or in whom the pantopaque study is equivocal. It may be necessary in some cases to explore the internal auditory canal surgically to confirm the diagnosis. Each case is different and must be judged on its own merits.

Team work is the key to the diagnosis of these tumors. The otolaryngologist, audiologist, neurosurgeon and radiologist working together will discover these tumors when they are small and their surgical removal can be accomplished with a low morbidity and mortality.

SUMMARY

The early diagnosis of acoustic and other cerebellopontine angle tumors depends upon a high index of suspicion on the part of the examining physician. A team approach including the audiologist, neurosurgeon and radiologist

is encouraged. The paper deals with some of the common pitfalls that can mislead and confuse the diagnosis of these tumors. Representative case reports have been presented to emphasize some of these difficulties.

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The Significance of Hematuria

John F. Redman, M.D.*

Because of the efforts of the American Cancer Society the seven danger signals of cancer are common knowledge to the public. It is disturbing to find that even today the third danger signal, that of unusual bleeding, is treated as lightly as it is by practicing physicians. Two cases illustrate the need for emphasizing the significance of hematuria and the obligatory evaluation that should ensue.

CASE REPORTS

Case No. 1. I. D., a 78-year-old white female, had an episode of gross hematuria with an equivocal history of dysuria. She was treated by her personal physician for a lower urinary tract infection with a sulfonamide on the basis of a voided urine. Because it was assumed that a cystocele might have been an etiologic factor she was referred to a surgeon for an anterior repair. Because of the history of hematuria he obtained an intravenous pyelogram which demonstrated no abnormalities. The day prior to surgery the patient's grandson, a physician, inquired if cystoscopy had been done to complete the evaluation of hematuria. It had not been done; and the patient was, therefore, referred to a urologist. Cystoscopy demonstrated a 2 x 2 cm. grade II transitional cell carcinoma of the bladder overlying the left ureteral orifice. Transurethral resection of the lesion produced a favorable result.

Case No. 2. M. J., an 18-year-old white male soldier, was seen in the Emergency Room the night before his scheduled departure for Viet Nam. He was complaining of non-specific left upper quadrant pain. A poor historian, he gave no history to suggest gastrointestinal or genitourinary disease. Urologic consultation was called for, however, because of a urinalysis which showed microscopically 8-10 red blood cells per high power field and 5-7 white blood cells per high power field, a two bottle test, i.e., urine collected by fractionating the voided urine into the first voided ounce of urine followed by the subsequent midstream urine, was done. The urine analysis obtained showed that the first portion of the urine, representing a urethral wash, contained less blood cells than the latter

fraction of the urinary stream which suggested bleeding from a site other than the bladder neck or urethra. Because of the boy's impending departure, an excretory urogram was done that night which showed a horseshoe kidney with almost complete obstruction of the right ureter by a large calculus in the lower one-third of the ureter. The left renal mass was drained by a ureter which was partially obstructed at the ureteropelvic junction. His creatinine clearance was only 34 cc/minute. It is a safe assumption that a tragedy was averted.

DISCUSSION

Hematuria is an abnormal finding. By definition hematuria is the presence of blood cells in the urine and includes even that which is found only microscopically. As many as 3-5 red blood cells per high power field on examination of a centrifuged 5 cc. of urine may be considered within normal limits but certainly deserves follow-up urinalyses as normal urine should contain no blood cells. The character of the blood passed whether dark or bright; the position of the blood in the urinary stream whether initial, terminal, or total; and the presence or absence of pain in relation to voiding are the substance of pertinent inquiries regarding hematuria but have no bearing on the possible gravity of its etiology. One of the most common presenting complaints of patients with renal cell carcinoma, transitional cell carcinoma of the renal pelvis, and transitional cell carcinoma of the bladder is hematuria.¹⁻⁴ Herein lies the significance of hematuria.

The second case report illustrates that hematuria may also suggest serious pathology other than neoplasia.

Many physicians fail to realize that all hematuria is significant, even that which is microscopic; and either choose to ignore it or conduct an inadequate evaluation of the problem. There are myriad causations of hematuria, a listing of which is beyond the scope of this communication. The majority of patients with hematuria will have either an infection or inflammation, calculous disease, or a neoplasm. There are several important investigations to be considered in the thorough evaluation of hematuria, but there are two which are absolutely necessary.

*Division of Urology, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205.

These are an excretory urogram and cystoscopy. For the excretory urogram to be declared a normal study it is imperative that the contrast medium completely delineates all of the collecting structures of the kidney including, at least in composite views, the ureters. For these criteria to be met those who perform this examination should have experience in the subtleties of radiographic techniques. Cystoscopy is a general term for the endoscopic examination of the urethra and bladder which includes panendoscopy. Although often the endoscopic instruments are easily introduced into the patient, particularly the female, the recognition of pathology is often difficult; and, therefore, the examination should be rightfully undertaken by a genitourinary surgeon.

SUMMARY

Cancer of the urinary tract is most often mani-

fest first by hematuria, and an early diagnosis provides the greatest opportunity for cure. Physicians are responsible to their patients with hematuria to insure that they receive an adequate excretory urogram and cystoscopic examination in the course of their evaluation even when the hematuria seems insignificant.

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Heat and Cold Injuries

Robert G. Eubanks, M.D.*

HEAT EXPOSURE AND INJURY

Heat induced illness is the result of disordered physiology that is a by-product of thermoregulation. Not all disorders are due to accumulation of body heat; some may be caused by indirect physiologic failures such as salt and water imbalance or circulatory collapse.

There are three separate syndromes which result from exposure to excessive heat: HEAT CRAMPS, HEAT EXHAUSTION, and HEAT STROKE. Although each of these syndromes is encountered in a pure form there is frequently an overlap of the syndromes and difficulty in distinguishing between them.

Heat is lost from the body through: (a) radiation, conduction, and convection from the skin; (b) warming and humidifying the inspired air; (c) evaporation of sweat and insensible perspiration; and (d) urine and feces. Radiation is responsible for about 50 percent of the total heat loss and convection for about 15 percent. Evaporation of water from skin and lungs accounts for about 30 percent and heat loss from urine and feces accounts for only 2 percent or less of the total heat loss. The total quantity of heat loss in 24 hours must, of course, just equal the amount produced, otherwise the body temperature would rise or fall.

The body attains or maintains a particular temperature as a result of a balance between heat production and heat loss. The hypothalamus effects the balance between these two factors and thus serves as a thermostat. Heat production is the by-product of all body metabolism, being generated primarily by oxidative processes. Coupled with this is the fact that as temperature increases, the rate of chemical reaction increases—this being the biochemical equivalent of a further increase in metabolism. If restraints are not placed upon the system, a vicious cycle could develop—increased metabolism causing increased heat, causing further increased metabolism, etc. Within physiological limits the restraints on the system are imposed by the hypothalamus. As the temperature rises, the hypothalamus reacts by decreasing heat

production and by increasing heat loss. A decrease in heat production is brought about by a decrease in muscle tone and by the elimination of shivering. Heat loss is promoted by an increase in peripheral blood flow and by stimulating the sweat glands—homeostasis being largely dependent on control of blood flow and sweating. The upper limits of profuse sweating may produce some 2½ to 3½ liters/hour and with alteration in thermal load the cutaneous blood flow may change more than a hundredfold.

Experiments in humans after acute heat stress have shown a decrease in peripheral resistance and a decrease in pulmonary artery pressure and resistance. Also increases of cardiac output, heart rate, and stroke volume have been demonstrated. In the hypermetabolic state caused by hyperpyrexia when blood flow cannot keep up with tissue needs, the tissues become hypoxic, and metabolic acidosis insues. The hypoxia and acidosis cause local paralysis of vasomotor mechanisms and capillary-bed engorgement. The acidotic tissues are refractory to endogenous catecholamines and exogenous vasopressors. The venous return declines, which reduces the already inadequate cardiac output. The release of intracellular potassium depresses the myocardium further. The changes in pulmonary flow may produce an alternation in the ventilation-perfusion ratio which will further aggravate the hypoxic situation. Such a state, if continued unchecked, of course leads eventually to peripheral vascular failure and death. In the final analysis the three syndromes result from the disparity between the internal (metabolic) plus environmental (climatic) heat load and the capacity for eliminating heat.

The physical effects of heat are accentuated by work. The harmful consequences depend on many factors, among which are heat load, work load, state of acclimatization, hydration, salt and electrolyte balance, physical fitness, training, age, rest, and fatigue.

In population studies of death due to heat exposure it was shown that the highest incidence occurs during the months of MAY through SEPTEMBER. Further, the race most affected was the WHITE RACE and the ages most af-

* Intern, Baptist Medical Center, Little Rock, Arkansas. Presented at the annual AAOS Conference on Emergency Care and Transportation of the Sick and Injured, Little Rock, Arkansas, October 20, 1973. This paper is a composite of the referenced authors' writings and is not presented as an original work but represents an undertaking to summarize present-day thinking.

fects were 20 to 70 years of age with the greatest death incidence being in the 50 to 70 age range. During the particular period of this retrospective study (1952-1955) ARKANSAS was shown to have a death incidence of .82 *per 100,000* population making us aware that although generally considered a moderately temperate climate, our area can provide the environment necessary to produce heat injury if not death.

HEAT CRAMPS

Heat cramps are said to be the result of electrolyte imbalance alone. They may occur in persons working at high temperatures and drinking large quantities of water where the pathophysiological change is a dilution of body fluids — which is really a form of water intoxication — or they may occur if the salt (NaCl) content of the body is decreased, as will occur with sweating and a low salt intake. Exertion will then induce severe painful muscle contractures. Without any prodrome the voluntary muscles begin fibrillary twitching and then proceed to spasm which may be very painful. The abdominal wall and extremities are most often involved. The episode usually occurs late in a workday and is accepted by some workers as a nonserious occupational hazard. Since the cramps are corrected promptly by salt replacement, workers rarely seek medical care. Diagnosis is usually based on a history of an abundant intake of water during sweat-producing work at high temperatures followed by characteristic muscle cramps. Temperature is normal and cardio-vascular function is unimpaired. Severe cases may require IV isotonic saline, however, salted foods or fluids (1 tsp/qt water) are usually adequate. Prevention is dependent upon a sufficient intake of salt, usually about 3 gms. extra per day. This requirement can be met for most persons by the liberal use of the salt shaker at mealtimes.

HEAT EXHAUSTION

A more serious circulatory disorder associated with depletion of both salt and water is heat exhaustion. The concentration of body fluid is not altered remarkably, but a decrease in blood volume accounts for the manifestations, which can develop insidiously over several days or upon sudden exposure to a high temperature. There is a dilation of the peripheral vessels

greatly increasing the vascular space. The heart rate and cardiac output increase and the blood pressure may fall a little. The symptoms are indicative of cardiac insufficiency.

Early symptoms include: headache, fatigue, confusion, and drowsiness. Anorexia, visual disturbances, and vomiting may follow and if persistent lead to circulatory collapse. However, the patient is usually incapacitated in the early stages of the illness, so that treatment is begun early; hence the illness is rarely fatal.

The clinical picture is one of peripheral vascular collapse with pallor, profuse sweating, decrease in blood pressure, increase in pulse, and little if any elevation in temperature. The patient may feel extremely uncomfortable and may be mildly dyspneic. The patient may even collapse and lose consciousness.

Treatment includes removal of the patient to cool surroundings, and if dyspneic the head and shoulders should be propped up. Replacement of salt and water is then instituted. Drinking of isotonic saline is useful, but a patient can seldom take more than 20 gms. of salt per day orally. Bed rest is indicated.

HEAT STROKE

Heat stroke is a rare condition compared with heat exhaustion. However, it is an acute and dangerous form of heat disorder. It is one disorder that must be treated as a disease entity resulting from collapse of the temperature regulatory mechanism. There appears to be a complete breakdown of the heat regulating mechanism and unless the temperature is promptly reduced, there may be permanent damage to the nervous system and possible death. Untreated cases of heat stroke are fatal and in about one third of the uncomplicated treated cases the patients may die.

The pathogenesis of heat stroke is obscure. Its onset usually occurs with exertion, which may be quite mild. It is probable that heat stroke requires an intercurrent infection, the toxins from which disturb the heat regulatory center in the hypothalamus, but this has not been proven. Cardiac failure, peripheral circulatory failure, and sodium chloride depletion do not appear to be causally related, but protracted exposure to unusual degrees of heat, especially when nights do not cool, old age, degenerative

diseases, the acute effects of alcohol, and as mentioned previously, infection seem to be important predisposing conditions.

High body temperature causes the signs and symptoms of heat stroke. It is characterized by high body temperature (ranging from 41-43°C (106-110°F) rectal), convulsions or coma, and cessation of sweating. These are the result of positive heat storage.

In most cases the onset of symptoms is with sudden delirium or coma. Headache, numbness and tingling, dizziness, restlessness, or mental confusion may be experienced for varying lengths of time before collapse. Cessation of sweating may also be noted as a prodromal symptom — this being universal, not sparing face and neck and is presumably of central origin. Most patients are in a coma, but the CNS features may range from disorientation to involuntary limb motion or coarse tremors. The respirations may be deep and the rate at least double normal. This can lead to respiratory alkalosis and tetany. The pulse is bounding and the rate may be as high as 150 and usually there is an elevated blood pressure. Shock commonly follows. This entity is characterized by a rising temperature with dry, hot skin, and the hallmarks are ANHIDROSIS, HYPERPYREXIA, and COMA.

Treatment must include supportive management as well as establishment of negative heat balance. Speed is essential in lowering body temperature to avoid brain damage. There seems to be some correlation between the prognosis, and the height of the fever, as well as its length. Treatment should be aimed at reducing the temperature to 40°C (104°F) within one hour.

A cold water bath or spray is the most effective and rapid method for body cooling. Wet sheets may be wrapped around the body and evaporative cooling accelerated with fans. However, the vasoconstriction produced in the skin by the use of extreme surface cooling reduces the interchange of blood between the interior and surface of the body, so that the actual temperature deep within the tissues may be rising at a time when the surface is extremely cool. Thus, it is important that MASSAGE be used to increase the circulation between the surface and interior. Rest and sedation are useful in reducing metabolic heat production.

After reducing the temperature to 40°C with-

in one hour, the temperature will continue to fall but a secondary rise to 40°C may occur within the first day, and must be corrected with cooling techniques. As much as a week may be necessary for stabilization of the body temperature and return of sweating.

When treatment has been delayed for more than four hours or has not been immediately effective, there may be shock or residual damage such as pulmonary edema, cerebral ataxia, hepatic or renal failure, or myocardial damage.

Prevention is approached through identifying the environments and adapting human activity to it.

COLD EXPOSURE AND INJURY

The same physical laws regulate temperature exchange in heat and cold. The effects of cold vary from the unpleasantness of goose pimples and shivering to gangrene or death from extreme or protracted exposure.

Several factors influence the injurious effects of cold. Two of the most significant ones are humidity and the presence of wind (wind-chill factor) both of which accelerate the withdrawal of heat from body tissues. As an example, the chilling effect of a temperature of 20°F combined with a wind of 35 mph is equal to the chilling effect of 20° below zero with no wind. So that cold air alone is not nearly as dangerous a freezing factor as a combination of wind and cold.

Other factors influencing cold injuries include immobility and occlusive vascular disease which both influence the rate of peripheral blood flow. Cold injury is rarely experienced by a healthy person adequately clothed but almost always seems to be related to other factors such as fatigue, a sudden storm or accident, intoxication, exertion, or a predisposing illness.

GENERAL BODY COOLING

General body cooling is caused by exposure to low or rapidly dropping temperatures, cold moisture, or snow or ice. Cooling makes itself manifest in five stages:

1. Shivering, which is an attempt by the body to generate heat. This is a protective mechanism that can result in as much as a four or five-fold increase in metabolic rate.
2. Apathy, sleepiness, listlessness, and indifference.

3. Unconsciousness, with a glassy stare, a very slow pulse and slow respiration rate.
4. Freezing of the extremities.
5. Death.

In extreme degrees of exposure of the whole body to cold it has been found that rapid application of external warmth is life saving, just as the opposite procedure is essential in heat stroke. This is an acute emergency and requires rapid transfer of the patient to a medical facility. It is essential to keep the patient dry, to replace any wet clothing with dry wraps and to apply external heat to both sides of the body using campfire, hot water bottles, or body heat from rescuers or others. Some form of external heat must be used to maintain the warmth level. Warm liquids and a warm bath are other immediate procedures if available. Oxygen is indicated for it has been found to be exceedingly difficult to re-warm and maintain the general body warmth of an hypoxic injured patient. Smoking is absolutely avoided as it causes constriction of blood vessels. Cardiopulmonary resuscitation (CPR) may be necessary.

TRENCH FOOT (IMMERSION FOOT)

Trench foot and immersion foot are all variants of a single disorder, modified by duration of exposure, wetness, and chilling. These are primarily military injuries produced by prolonged exposure to cold in damp surroundings, often with temperatures well above freezing, but in circumstances where it is an element of prolonged immobility. It was seen most frequently in persons who had been shipwrecked and immersed for hours in cold water and was also seen to result if the feet alone were kept cold and moist as sailors working in wet boots, or soldiers in wet trenches.

Cold water removes heat from the body much more readily than does air at the same temperature, unless the air is moving rapidly (as the wind-chill factor mentioned previously). Thus immersion in water at temperatures near the freezing point is likely to be fatal to a normal person after 30-60 minutes, whereas he survives in still air at this temperature for many hours.

During actual exposure, the vessels are in vasospasm from both reflex mechanisms secondary to the action of cold on the general body surface and response from hypothalamic centers and from local mechanisms by direct effect of

cold upon the vascular walls. A decreased blood flow results. A decrease in oxygen tension is found, most likely secondary to the lessened dissociation of oxygen from hemoglobin by decreased temperatures. The metabolism of the tissue as a result of both the cold and the anoxia is greatly reduced. Capillary damage permits fluid of high protein content to leak into the surrounding tissues resulting in edema.

The affected parts (usually the feet) during the period of exposure are swollen, numb, and pulseless. Their color varies with the temperature from bright red to deep blue or waxy white, or may be mottled with areas of blue and white or blue and red. Within a few hours after removal from exposure, the feet become hyperemic — the increased warmth overcoming vascular spasm with concomitant maximum dilation of the vessels — and are severely painful, the pain often described as burning, scalding, or stabbing in character. The swelling increases (due to increased capillary pressure of the hyperemic state), blistering, ulceration, local wasting of muscles, and in the worst cases gangrene results (usually due to circulatory embarrassment by stasis from edema and thrombus formation). The hyperemic stage, which can last up to 10 weeks, often merges into one in which the feet are pale, cold, and very sensitive to cold exposure. Damage to peripheral nerves and sympathetic fibers is a regular occurrence in severe cases. Anesthesia, motor weakness, and muscular atrophy may last for many weeks. Persistent pain has been attributed to selective involvement of sensory nerves, to anoxia, and to scar tissue.

The treatment and care of this cold injury is much like that in Frostbite (which is discussed next) with one possible exception. Since the intensity of hyperemia, tissue damage, and pain may be enhanced by high temperatures, the affected extremities should be kept in a cool but not cold environment. The rest of the body is kept warm to release vaso constriction reflexly. More rapid thawing is dependent on clinical judgment and the amount of damage as seen with Frostbite.

FROSTBITE

Frostbite is due to freezing of tissues which may result in damage to skin, muscle, blood vessels, and nerve. Superficial freezing of tissues evidently begins when the temperature of deeper

tissues reaches about 10°C and —5°C is the lowest temperature to which cells may be slowly frozen and still survive. Frostbite injury results from exposure over a period of several hours. Most Frostbite is of the slow freezing type, but rapid Frostbite (occurring in a few minutes) takes place at high altitudes with extremely low temperatures and has predilection for the extremities rather than the face and ears.

Whether actual tissue freezing or decreased blood flow from vasoconstriction is most important in producing cell injury is unknown. Damage is probably due to a combination of direct freezing with the formation of extracellular ice crystals, inducing dehydration of cells, and to intense vasoconstriction. The vasoconstriction is produced by the two mechanisms mentioned previously and the reduced blood flow leads to capillary stasis and arteriolar and capillary thrombosis. Capillary permeability is increased and results in edema formation.

The traditional classification of Frostbite has been from 1st to 4th degree depending on the depth of tissue injury:

- 1st degree — edema and redness of the affected part without necrosis
- 2nd degree — formation of blisters
- 3rd degree — necrosis of skin
- 4th degree — gangrene of the extremity requiring amputation

Since the true extent of tissue damage cannot be judged on initial examination, a simpler classification of Superficial and Deep Frostbite is more practical.

Superficial Frostbite involves only the skin or the tissue immediately beneath it. There is a certain amount of whiteness or "waxy" appearance of the injured part at the outset. After rewarming, the frostbitten area will first become numb, mottled blue or purple and then swell, sting and burn for some time. In more severe cases, blisters will occur in 24 to 36 hours beneath the outer layer of skin. These slowly dry up and become hard and black in about two weeks. General swelling of the injured area will subside if the patient stays in bed or at complete rest — it will last much longer if he refuses to remain quiet. Throbbing, aching and burning of the injured part may persist for several weeks, depending on the severity of the exposure. After the swelling disappears the skin will peel and

remain red, tender and extremely sensitive to even mild cold, and it may perspire abnormally for a long time.

Deep Frostbite is a much more serious injury. This damage not only involves the skin and subcutaneous tissue but also goes deep into the tissue beneath (even including the bone) and is usually accompanied by the formation of huge blisters. In marked contrast to superficial frostbite blisters these take from three days to a week to develop. Swelling of the entire hand or foot will also take place, and may last for a month or more.

During this period of swelling, there may be marked limitation of mobility of the injured parts, and blue, violet or gray discoloration takes place. After the first two days, aching, throbbing and shooting pains may be experienced for two to eight weeks. The blisters finally dry up, blacken and slough off, sometimes in the form of a complete cast of the finger or toe, nail and all — leaving beneath an exceptionally sensitive, red, thin layer of new skin, which will take many months to return to anywhere near normal. Sometimes, itching and abnormally great perspiration persist for more than six months after the initial injury, and the part will suffer lengthy or permanent sensitivity to cold.

In extreme cases of deep frostbite permanent loss of some tissue may occur. After it has thawed, especially if rapid rewarming has not been done, the skin does not become red and blistered but turns a lifeless gray and continues to remain cold. In a week or two after injury, the tip of the injured area begins to become black, dry and shriveled, and the surrounding area may progress in one of two ways: the tissue may all become black, dry and shriveled to almost half the normal size and mummified right up to the beginning of healthy tissue (dry gangrene); or it may become wet, soft, swollen, and inflamed — the picture of infection (wet gangrene).

Superficial Frostbite can be treated immediately by rewarming — affected areas on the face and ears can be warmed with the hands. Frostbitten hands can be placed in the axillae, or frostbitten parts can be warmed on the exposed torso of a partner. Frostbitten areas should *not* be rubbed with snow or exercised.

Treatment of Deep Frostbite should be de-

layed until adequate facilities for rewarming are available. A frozen foot or toe that is rewarmed at the site of injury immediately causes the patient to become a litter case. No patient should ever be permitted to walk at all on thawed feet or toes, since very serious loss of tissue is almost certain to result. Once the patient has reached the site where he is to be thawed, two basic treatments should proceed simultaneously: first for exposure and second for frostbite. Therapy should always be very conservative since the depth of tissue damage is difficult to ascertain, sometimes for months. It is best to rewarm the tissues as rapidly as possible in 40 to 44°C (104 to 111°F) water. Massage, exposure to too high or dry temperatures, and reactive hyperemia should be avoided because they tend to increase pain, edema, and tissue loss.

Analgesics usually are needed during rewarming. Very little discomfort is noted for the first 10 minutes, but pain slowly increases, however, until at the end of the rewarming period, it is extremely uncomfortable but not unbearable. Only ASA (2 tablets) should be administered if the patient is suffering from other injuries, otherwise stronger analgesics may be used.

After rewarming, which usually requires about 20 minutes, the frostbitten area is exposed to room air (21 to 26°C — 70 to 78°F). Although pressure dressings may be used, the open method with sterile surroundings is usually preferred. Vesicles, bullae, and eschars are left untouched. Antimicrobials drugs are indicated if infection is present. Smoking should be prohibited. Regional sympathectomy has been reported as beneficial, both clinically and experimentally, if performed at an optimal time of 24 to 48 hours after frostbite occurs. Sympathectomy may conserve tissue and lead to earlier demarcation, cessation of pain, and healing of tissue. Vasodilator drugs have been recommended but have been shown of value only in animal experiments. Low molecular weight dextran and anticoagulants have received both favorable and unfavorable reports.

Eventually recovery is usually surprisingly good, the black eschar peeling off to leave normal

tissue beneath. Sensitivity to cold, paresthesias, and a predilection to repeated frostbite often persist. Then too, the affected part may be totally lost and amputation required.

The ultimate success in the treatment of frostbite appears to depend largely on two factors: the exercise of extreme care during and after rewarming, so that the delicate injured part is not further damaged in any way; and the prevention of infection, which becomes the paramount issue from the time of rewarming to the conclusion of treatment.

Frostbite is preventable and occurs rarely among those who have been instructed how to protect themselves. Prophylactic measures include observance of each other for signs of frostbite, wearing adequate, loose fitting, dry clothing, exposure for only brief periods when exercise is not possible, and avoidance of smoking before and during exposure.

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Office Orthopaedics

The analysis of joint fluid is an essential part of the diagnostic evaluation of any patient presenting with a joint effusion. Most physicians are quite familiar with laboratory tests used to analyze peripheral blood, urine, and cerebrospinal fluid, and they perform these tests routinely. However, joint fluid analysis is seldom done as a routine, and although joints are frequently aspirated the fluid is usually discarded. This is unfortunate because the composition of joint fluid may reflect the pathologic condition which exists within the joint. The pathology may be due to trauma such as a torn meniscus or fracture, local joint disease as seen in infections, or systemic disease which manifests primarily as an arthropathy such as arthritis or gout. By examining the joint fluid, considerable knowledge is gained concerning the disease state at its primary site of activity. This information greatly aids the physician in the diagnosis and treatment of synovitis. Synovioanalysis has been called a "Liquid Biopsy".

Certain pertinent tests can rapidly be carried out in the office immediately following the aspiration. Other tests require more refined laboratory analysis but this is readily available to any doctor either through a local laboratory or through "mail order" laboratories. The specific tests and their interpretation as well as the collection and preservation of the synovial fluid will be described.

The aspiration of joint fluid (arthrocentesis) must be carried out under strictly aseptic conditions. The skin over the joint is scrubbed and painted with an antiseptic solution; the author recommends an iodophor compound. Gloves are worn, sterile drapes applied, and great care exercised to assure a sterile procedure. The skin is anesthetized and an 18 gauge needle is then

Synovioanalysis ("Liquid Biopsy")

R. Barry Sorrells, M.D.*

inserted into the joint space. A quantity of synovial fluid sufficient for the desired tests is obtained if adequate fluid is available within the joint. If fluid is limited, priority must be given to certain tests and the utilization of the fluid available determined on the basis of the patient's clinical evaluation and diagnostic requirements.

The knee is the most frequently aspirated joint and the procedure is easily accomplished if certain landmarks are observed. (Fig. 1)

LANDMARKS FOR ASPIRATION OF THE KNEE JOINT

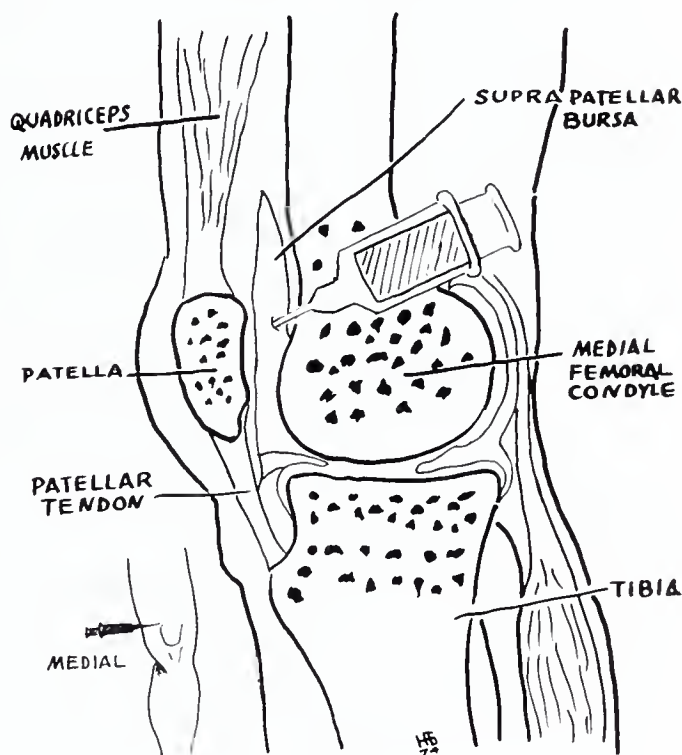


Figure 1

Following aspiration, a sterile specimen is first obtained. A portion of the fluid (approximately 5 cc.) should then be placed in a tube containing an anti-coagulant. 10% EDTA (ethylene diamine tetra-acetic acid) in normal saline (1 or 2 drops) is preferred as it allows better

*P. O. Box 5270, Little Rock, Arkansas 72205.

NONINFLAMMATORY EFFUSIONS									
CLASS I									
NORMAL									
TRAUMATIC									
DEGENERATIVE JOINT DISEASE									
SYSTEMIC LUPUS ERYTHEMATOSUS									
CLASS II									
MILD									
CLASS III									
SEVERE									
RHEUMATOID ARTHRITIS									
REITER'S SYNDROME									
CLASS IV									
ACUTE BACTERIAL INFECTION									
TUBERCULOUS INFECTION									
INFECTIOUS INFLAMMATORY EFFUSIONS									
A. PLAIN SPECIMEN									
1 APPEARANCE									
2 VISCOSITY									
3 MUCIN CLOT (CLASIS)									
4 TOTAL WBC									
5 CELLULAR MORPHOLOGY % polys									
6 CRYSTALS free intracellular									
B. ANTICOAGULATED SPECIMEN									
7 TOTAL PROTEIN ALBUMIN GAMMA-GLOBULIN IMMUNO-GLOBULIN									
8 COMPLEMENT total & β 1 C									
9 LATEX FIXATION & SENSITIZED SHEEP CELL									
C. CLOTED SPECIMEN									
10 BACTERIA									
D. CULTURE/SMEAR SPECIMEN									

morphologic identifications of cells when they are stained. This material is readily available, inexpensive, and easily stored. The remainder

of the aspirated fluid (ideally 3-5 cc.) is placed in a plain tube, allowed to clot, and is centrifuged to remove all cellular material.

ANALYSIS AND INTERPRETATION

(See Table)

A. Plain Specimen**(1) Appearance**

The analysis of joint fluid begins by observing its gross appearance during aspiration. Normal joint fluid is yellowish and clear. A hemarthrosis is suspected should the entire fluid appear evenly bloody and yield a xanthochromic supernatant after centrifugation. Blood in the joint fluid as a result of a traumatic tap will be unevenly distributed throughout the syringe, may clot during the aspiration and will usually decrease with continued aspiration. Fat globules in the fluid indicate fracture of bone. Turbidity of the fluid occurs with an inflammatory process and increases with the degree of inflammation present. Thus fluid from an osteoarthritic joint which is relatively quiescent clinically may be clear while that from an active rheumatoid joint may be quite cloudy; and frank pus may be aspirated from a septic joint. Fluid from an acute gouty joint may appear milky.

(2) Viscosity

Viscosity is one of the unique physical properties of joint fluid, and is influenced by the hyaluronate concentration. Hyaluronate is a long chain high molecular weight polysaccharide produced by the synovium whose levels in normal synovial fluid range from 1.7 to 4.0 mg/ml. The decreased concentration of hyaluronate and the shorter length of hyaluronoprotein chains may explain the lower relative viscosity of fluids from a chronically inflamed joint as seen in rheumatoid arthritis.

Clinically, the viscosity can be grossly measured immediately after aspiration by noting how far a drop of joint fluid will "string" when expressed from the syringe or a pipette. A drop of fluid can be stretched between the examiner's index finger and the thumb to see how far it will string before breaking. Fluids of very low viscosity will behave like water and not stretch at all. A high viscosity fluid will form a long string when stretched.

(3) Mucin Clot

The non-specific designation "mucin clot" refers only to the clot which is formed when acetic acid is added to the joint fluid, and does not imply the presence of mucin which is not found in joint fluid. Lowering the pH of the

joint fluid allows proteins in the fluid to form a loose association with the hyaluronate and both precipitate as a clot. Good quality clots do not break up when agitated. Poor quality clots break into flaky particles or a cloudy suspension and indicate the presence of a chronic active inflammatory process. The mucin clot or Rope's Test is carried out by adding a thin layer of joint fluid to about 7 cc. of 5% acetic acid in a test tube. The tube is agitated and observed. A good mucin clot (normal joint fluid) remains suspended at the top of the fluid level. A poor mucin clot (rheumatoid arthritis) yields a broken clot, which flakes through the fluid and tends to become turbid.

B. Anticoagulated Specimen

As indicated in Table I, the anticoagulated specimen should be observed for: (4) *White Blood Count*, (5) *Cellular Morphology*, and (6) *The Presence of Crystals*. The white blood count is performed in the usual manner, except the joint fluid is diluted with saline rather than HCL. As noted in the table there is a wide range in the white blood count. Uric acid crystals, as found in acute gout, and calcium pyrophosphate crystals, as found in articular chondrocalcinosis (pseudogout), are observed when a wet preparation of joint fluid cells is examined under compensated polarized light. The uric acid crystals demonstrate a negative birefringence, are long needle-like crystals, and are found extracellularly as well as in polys and mononuclear cells. The calcium pyrophosphate crystals are similarly found, but exhibit a weakly positive birefringence, so that they appear blue when their long axis is parallel to the slow vibration of the compensator used in the polarizing microscope, and yellow when rotated 90 degrees. This is exactly opposite to the uric acid crystal. This test can be carried out in most laboratories. When a polarized light microscope is not available, the insertion of a polaroid disc filter into the ocular and condenser of a standard light microscope is satisfactory for polarized light viewing.

C. Clotted Specimen (Cell Free)

An aliquot of joint fluid is placed in a plain tube, centrifuged, and allowed to stand at room temperature for 10-15 minutes. The tests, as noted in Table I, which are more or less specific, can then be carried out. The usual range of

(7) *Total Protein* both in normal and disease states is noted in the chart.

The (8) *Complement Components* are a group of non-specific immunological reactions. Complement levels have been determined in normal joint fluids, and are very low as compared to serum levels. A general pattern of complement level has been observed in the serum and joint fluid of certain diseases. Ideally, specimens should be tested for complement immediately. In the event that this is not practical, the technician may remove 2-3 cc. of the supernatant specimen, which must be frozen within 1-2 hours after collection and not thawed until just before beginning the complement test.

Among the most important tests of the joint fluid on the clotted specimen are the (9) *Agglutination Tests* which confirm the presence of rheumatoid factor. Rheumatoid factor has been observed in plasma cells in rheumatoid synovium and is thought to be locally produced within the involved joint. Therefore, it is most commonly found in the joint fluids of rheumatoid patients.

Since serum rheumatoid factors have been detected in a variety of non-rheumatoid diseases, it is possible but quite unusual to find positive rheumatoid factor titers in the joint fluid of a patient with a non-rheumatoid condition. A high titer rheumatoid factor in the joint fluid of a patient with an effusion of unknown etiology should strongly suggest a diagnosis of rheumatoid arthritis. Rheumatoid factor may be initially demonstrated in the joint fluid while the serum test is negative, thus allowing a much earlier diagnosis. This test may be carried out in most laboratories.

The (9a) *Antinuclear Antibodies* (ANA) are those which react with mammalian nuclear constituents and occur in all three classes of immunoglobulins. These can be assayed with fluorescent antisera. Nearly all patients with active systemic lupus erythematosus have antinuclear antibodies in their sera. From 10 to 65% of rheumatoid patients demonstrate antinuclear antibodies in their sera depending on the sensitivity of the test. In rheumatoid arthritis, 22% of patients demonstrate antinuclear antibodies in their joint fluid. These same patients usually have antinuclear antibodies present in their serum. It is rare to find a positive ANA in joint fluids of diseases other than rheumatoid arthritis

or systemic lupus erythematosus. This test is presently of limited availability.

D. *Sterile Specimen*

Cultures for suspected bacteriologic or fungal infections must be part of any joint fluid analysis. Gram stains and Ziehl-Neelsen stains can also be done routinely on the cellular sediment. It is important to remember that gonococcal and tuberculosis arthritis are still prevalent. Particular care should be used in culturing the joint fluid if a gonococcal infection is suspected. The specimen should be inoculated on chocolate agar at the bedside and be kept for at least four days in a 10% CO₂ atmosphere. Any delay in culturing the fluid after it is aspirated will reduce the yield of positive cultures. Gram-negative intracellular diplococci can also be found in the gram stained slide with gonococcal joint infections. Guinea pig inoculations should be carried out if tuberculosis is suspected. Sensitivities should be requested along with the cultures.

SUMMARY

In the evaluation of the patient with a joint effusion, the following "flow sheet" should be helpful in the procedure of arthrocentesis and synovioanalysis:

Aspirate joint under sterile conditions, and:

A. *Plain Specimen:*

- (1) Observe appearance
- (2) Determine viscosity
- (3) Observe mucin clot with acetic acid

B. *Anti-Coagulated Specimen* (5 cc. if possible):

- (4) CBC
- (5) Differential (morphology)
- (6) Polarized light examination for crystals

C. *Clotted Specimen:*

- (7) Total protein and electrophoresis
- (8) Complement level
- (9) Latex fixation (RA test)
- (9a) ANA test (if indicated and if available)

D. *Sterile Specimen:*

- (10) Culture and Sensitivity (Routine aerobic and anerobic, acid fast, fungus), and Gram stain smear

Footnote*

Much of the information herein is taken from the monograph "Joint Fluid Analysis" by Cracchiolo, Barnett, and Pearson from the Synovial Research Laboratories, Division of Orthopedic Surgery and Division of Rheumatology, UCLA Medical Center, Los Angeles, California.



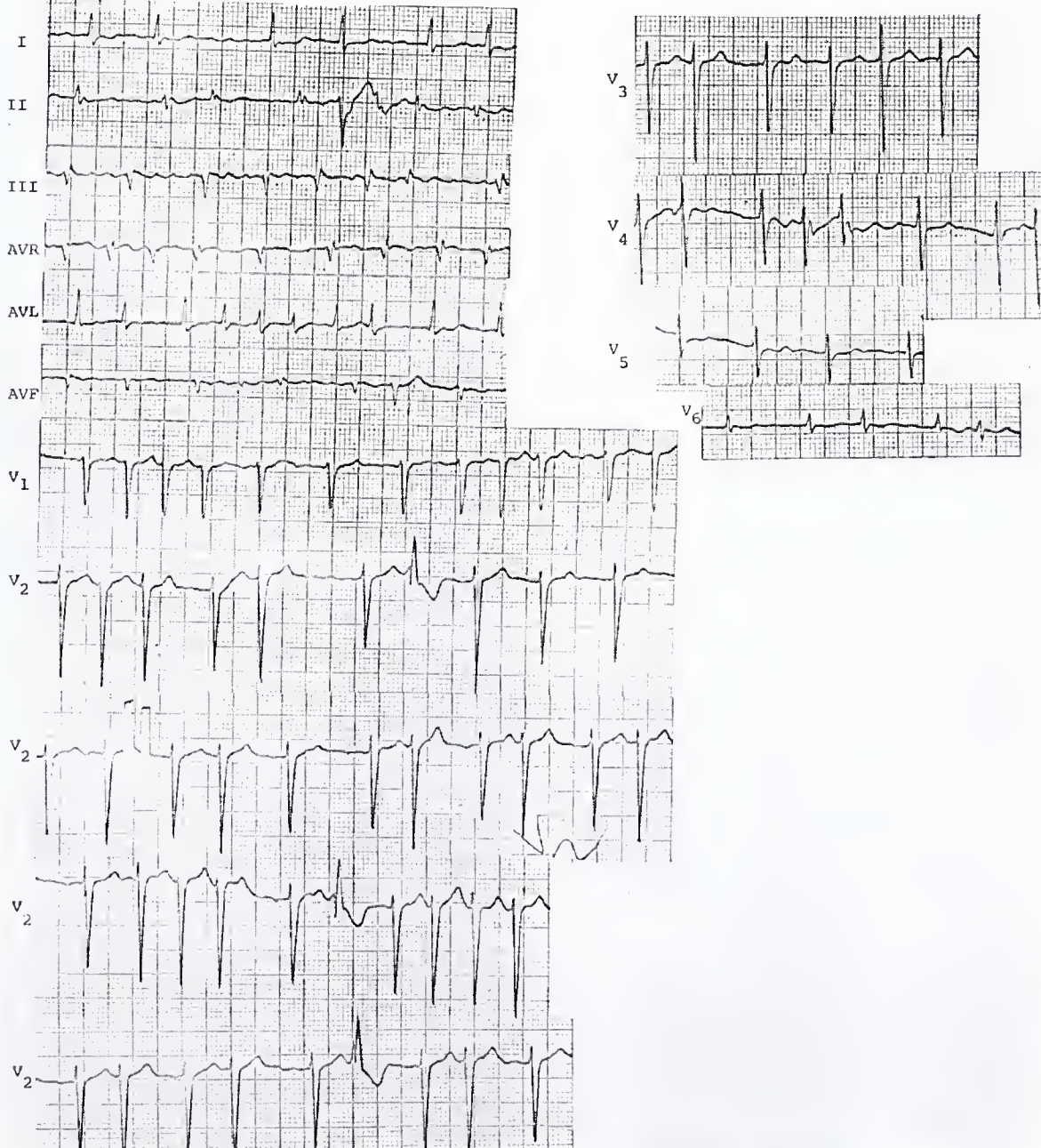
ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 71)

39 YEAR OLD WHITE MALE WITH HISTORY OF PAROXYSMAL TACHYARRHYTHMIAS, 6 DAYS BEFORE THIS TRACING HE CONSULTED HIS PHYSICIAN WHO DIGITALIZED HIM WITH 1.5 MG DIGOXIN THAT DAY. HE SHOWED NO RESPONSE, AND THEREFORE RECEIVED ANOTHER 0.75MG TWO DAYS BEFORE THIS TRACING AND 0.50MG THE DAY BEFORE THIS TRACING. ON THE EVENING BEFORE THIS TRACING HE RECEIVED TWO DOSES OF LANTOSIDE C 0.2MG I.V. AND THE VENTRICULAR RESPONSE SLOWED FROM 180 TO ABOUT 120.



John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Water Sense and Safety

Carol A. Hopkins, PH Educator*

Fishing, boating, camping, swimming, skiing and ordinary water enthusiasts begin to muster up all of their energies for late spring and summer fun. Children are out of school and weekends become crowded with much activity.

But, how many people heed the warning signs? Do you become neglectful of basic safety rules simply because you are "comfortable" near and in the water?

By now, many Arkansans have wet the bottoms of their boats. Year-round boaters and fishermen often forget needed safety precautions. But when boat traffic begins to increase it's time to check acceptable practices.

Otherwise the occasional outing or weekend jaunt on lakes and streams could become catastrophic. If those familiar with waterways in Arkansas are forgetful, what's going to happen to the new group of young people who will be taking to the water?

Many are apt to take chances that could be deadly, particularly if they have not been taught the proper way to do things safely. Children and young people learn specific practices by watching and imitating their parents. If parents and other adults take chances, the children most likely will do the same.

In Arkansas there are 79,318 registered boats. These have a ten horsepower motor and above. It is estimated that there also are between 70,000 and 90,000 unregistered boats. There are several thousand acres of surface water, some of which are in restricted areas. Still it's plenty of room in which to have an accident or drown.

In 1971 and 1972 respectively 111 and 135 persons died in water related accidents, according to the Bureau of Vital Statistics.

Most of these deaths, caused by ignorance,

carelessness or total neglect, could have been prevented.

It's hard to believe that less than 50 percent of our population can swim well enough to save themselves. Many people wade and step into deep holes and drown, and others fall into the water and drown while trying to rescue someone else.

Many people enjoy floating on innertubes, air mattresses and other flotation devices. For the non-swimmer or novice swimmer these can be dangerous. Many people either fall off or lose their holds on these flotation devices and are unable to swim well enough to survive. Standing in boats or sitting on the gunwales can be fatal if a sharp change in direction is made.

If there is a body of water, someone manages to die in it. Creeks, irrigation ditches, tanks, bayous, cesspools, septic tanks, gravel pits, home and apartment swimming pools and even mud puddles are potentially dangerous.

An upswing in drownings and near-drownings occurs with the end of each school year. More than half the year-round victims are under 30 years of age—led by boys ages 16 to 17. The accident rate for males is higher in every field, but not to the extreme shown in water-oriented accidents.

If you or your family takes part in water-oriented activities, you should know how to swim and make certain your children can swim. Red Cross swimming and life saving courses are available in almost every town and city. If not, find a private instructor or check with the YMCA or other civic groups.

Even if you're letting little children paddle in a wading pool, there should be an adult or older child constantly supervising them. It's possible to drown in just a few inches of water!

*Arkansas Department of Health, Division of Public Health Education, 4815 West Markham, Little Rock, Arkansas 72205.

Regardless of age or swimming ability, no one should ever swim alone. A diving accident, slip or a severe cramp could immobilize the swimmer. If you own a home pool, it should have high fence which will keep uninvited, curious youngsters out.

When swimming in a lake or at a beach, stay within the prescribed swimming areas. Many people drown when trying and failing to swim across a lake or river. Water can sap your strength quickly so do not misjudge your ability.

Don't swim immediately after eating, or while cold, tired or overheated. And if you get into trouble, don't be too proud to yell for assistance.

All boaters should have the necessary life-preserving equipment on board. This includes an approved life preserver for each boat passenger. Boats should be equipped with paddles, lights, anchor, a rope and lifebuoy for use in case someone falls overboard. It's better to toss something to a person in trouble than to go into the water after them.

Skiers are blamed for a lot of things, from ruining fishing to making swimming next to impossible — or unenjoyable.

High speed boats do leave quite a wake, and unthinking skiers infringe on the rights of others in far too many cases — including other skiers. Visit a busy lake any day and you'll witness many near-tragedies. Many times fallen skiers are almost run down by other boats.

If you're planning to ski, you should be a swimmer and always wear a life preserver. Devise a system of hand signals with those in the boat. There should always be someone in the boat in addition to the driver, since he should be busy watching for other boaters, swimmers and skiers. A lifebuoy is a good think to have in a boat while skiing, too.

Avoid swimmers and the boats of fishermen. Stay away from piers and docks and be alert for underwater obstructions — fences, stumps, moss. A fall among such things could be disastrous.

A person in the water is like a sitting duck unless everyone is on their toes. There are far too many cases of skiers being struck by other boats, hitting obstructions or having tow ropes wrapped around them.

Another good precaution is to cut your motor when letting a skier out of the boat or taking one in.

Over 100 million Americans enjoy water sports or spend part of their spare time on or near lakes, rivers, streams or oceans. Nearly 7,000 of these drown each year. Over half of those who drown were never meant to be in the water — the boat overturned or they tripped or fell.

With a little common sense, courtesy and planning, outings can be both safe and fun.



RESOLUTIONS



WHEREAS, we, the colleagues of Dr. Ellis Pratt Cope, do note with sincere sorrow his recent death, and

WHEREAS, Dr. Cope for more than thirty years as a member of this Society was held in high esteem by his fellow physicians and by his countless patients to whom he ministered, and

WHEREAS, his contributions to the community in his professional and personal life will long be remembered:

BE IT THEREFORE RESOLVED: THAT, this resolution be made a part of the permanent records of the Society; and

THAT, a copy of this resolution be forwarded to Dr. Cope's family as an expression of our sincere sympathy; and

THAT, a copy of this resolution be made available to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
Henry Hollenberg, M.D.
Robert Watson, M.D.

Approved by
Executive Committee
April 17, 1974



EDITORIAL

The Rhythm Theory

Alfred Kahn, Jr., M.D.

The evolutionary trends in biological development manifest themselves in various ways. One of the most interesting are the rhythmic changes which seem to be inspired by the biologic unit's contact with its environment. Some of these seem abundantly clear as the hibernation of bears seems induced by weather, i.e., periodic cold. Some rhythmic changes are less easy to understand. The cycle time of the biologic rhythms vary greatly from circadian, monthly, and annually.

Sleep patterns follow a circadian pattern. There are different levels of sleep but all humans require a certain amount of sleep, especially the deeper levels. The control of sleep patterns is unknown, including REM type sleep which seems to be very important for a sense of well being.

Radio-immune assay has enabled physicians to study biochemical substances present in minute amounts as nanograms. Prolactin has been studied intensively through this new tool. Sassin, Frantz, Kapen, and Weitzman have done a recent study entitled "The Nocturnal Rise of Human Prolactin Is Dependent On Sleep" (Journal of Clinical Endocrinology and Metabolism, Volume 37, Page 436, September, 1973). They point out that Prolactin is released from the pituitary during sleep. It would thus appear that Prolactin has a circadian rhythm — and in a certain sense it is. However, the odd thing is that although Prolactin is released at night, it is sleep dependent. These authors clearly showed that the rhythmic release of Prolactin is in fact not an independent inherent rhythm but is released mostly during sleep and if sleep is disturbed the marked nocturnal Prolactin release is upset. For example, they inverted the sleep

pattern of subjects and found the Prolactin pattern also inverted. This leaves much room for speculation since Prolactin seems to be released by a releasing substance from the hypothalamus. The hypothalamus in turn has connections with brain areas presumed to be related to sleep, emotions, and automatic functions.

Another pituitary substance seems to follow a circadian rhythm, namely, growth hormone. Alford, Baker and Burger reported on "The Secretion Rate of Human Growth Hormone. I. Daily Secretion Rates, Effect of Posture and Sleep" (Journal of Clinical Endocrinology and Metabolism, Volume 37, Page 515, October 1973). The growth hormone levels were studied over 24 hour periods in six subjects. It was found that the pituitary release of growth hormone was three times greater at night than during the day. Again, growth hormone is a substance known to be released from the pituitary by a releasing substance which is apparently made, stored and released from the hypothalamus.

Monthly rhythms are best exemplified by the menstrual cycle. What environmental phenomena might have patterned this 28-day cycle. Many things have been postulated on a totally unscientific basis: tides, cycles of the moon, etc.

An area for much further investigation is what is the impact when these basic physical and physiological biologic rhythms are frustrated. For example, what exactly does insomnia do in the non-lactating adult who is not seemingly highly dependent on growth hormone as Prolactin? Could some wearing out of a neurological mechanism lead to faulty sleep patterns which would in turn upset growth hormone and Prolactin output—and perhaps other endocrine substances? Could depression states be the end product of this hormonal upset rather

than a causative factor? Depression and the climacteric seem to be closely interwoven lending further credence to an endocrine association.

In short, there are definite biologic tides, the cause of which is unknown but which may re-

late to the environment in our phylogenetic development. Furthermore, an area of extreme interest is the long range effects of the frustration of these rhythms or tides by disease and aging.



MEDICINE IN THE



THE MONTH IN WASHINGTON

The American Medical Association is playing a guiding role in an attempt to establish an American blood commission that would assure a national, all-volunteer supply of blood for transfusions and medical emergencies by December 31, 1975.

The plan was made public by Richard E. Palmer, M.D., now chairman of the AMA board of trustees, and spokesman for the major groups involved in collecting, distributing and using blood at a press conference in the AMA-Washington office.

Other major sponsors of the proposed American Blood Commission include the American National Red Cross, the American Association of Blood Banks, and the Council of Community Blood Centers.

The proposed plan is for a volunteer program controlled at the local level, with medical societies playing a major role. Some 150 national groups with an interest in a safe blood supply would be members of a commission that would oversee each regional program. The regional programs in turn would guide the activities of blood banks and transfusion facilities in their own area.

Last fall the Administration warned that if the private sector could not reach agreement on a national program a federally-mandated program would be sought from the Congress. The AMA stepped in and mediated the sharply different approaches advocated by the major blood groups.

The major difference had pitted a for-profit against non-profit blood supply. In the non-profit field, the American Association of Blood Banks (AABB) and the American National Red Cross have vied for the leadership role. The non-profit blood banks — largely hospital units — chiefly have favored a non-replacement fee for blood as the most dramatic way of attracting donors, whereas the Red Cross traditionally has relied on strictly volunteer blood.

Under the proposed plan, the for-profits would be out in the cold. The hope is that a non-replacement fee system will not be needed, though it would be permitted.

The AMA-proposed plan has been published in the Federal Register in order to give interested groups time to comment. At a later date HEW will sponsor a conference to consider comments and decide a course of action.

Commenting on the proposal, Dr. Palmer told the news conference it "builds on the strengths of the pluralistic system."

"These partners in the American Blood Commission can communicate the medical necessity of a dependable blood supply to the general public from which volunteer donors must come," he said. "The systematic coordinated recruitment of volunteer donors called for by this plan depends on a receptive public attitude.

"By the end of 1975 every blood bank associated with one of the three major blood banking organizations expects to be drawing 100 per cent of their blood supply from volunteer donors," Dr. Palmer said.

The American Medical Association has warned Congress that legislation before it would treat the health sector as "one vast, monolithic public utility" with the Secretary of Health, Education and Welfare "a health care czar."

Testifying before the Senate health subcommittee on a bill sponsored by Senator Edward M. Kennedy (D.-Mass.), AMA President Russell B. Roth, M.D., termed the bill "one of the gravest steps to be proposed concerning health care delivery." The measure calls for replacement of Comprehensive Health Planning and Regional Medical Programs by a formal planning system coupled with public utility regulations by state health commissions under HEW supervision. "We are opposed to the creation of public utility type regulatory controls and the planning mechanisms in this and similar measures," Dr. Roth said.

The bill before the Senate health subcommittee calls for a formal system of planning coupled with public utility regulation by state health commissions under the supervision of the HEW Department. It is part of a comprehensive measure extending certain public health service programs and making sweeping changes in the nature of the present Comprehensive Health Planning and Regional Medical Programs.

"In our view this extreme measure is unwarranted, without justification based on either experience or need. It carries serious potential for impeding a beneficial development of medical care," Dr. Roth said.

He termed the bill an "unprecedented federal involvement in matters which, under our federal system, have traditionally resided in state and local governments.

"We must caution against the imposition of a massive bureaucratic control of the health care system. The expertise within governmental bureaucracy must be questioned. We cannot afford to institute a system which can stifle meaningful competition, innovation and development of appropriate health care services and facilities. The economic forces inherent in this proposal could defeat the intention of this committee to foster the developments of improvements in our health care delivery system."

A major provision of the legislation would require the state health commissions "to determine prospectively rates used for reimbursement

purposes for health services of health care providers within the state and regulate all reimbursements if such health care providers made on either a charge, cost, negotiated, or other basis and review such rates at least once a year."

All of the authority ostensibly vested in the state bodies can ultimately rest in the HEW Secretary, Dr. Roth noted. He asked whether this means the federal government could:

- close down private health care institutions and even federal facilities?
- shut a municipal or state hospital?
- regulate salaries, wages, collective bargaining agreements of health care workers?

"Is the performance of the Secretary of HEW and the Administration so exemplary and so unquestionable that he should be the ultimate repository of the total authority over the entire health care delivery system?" Dr Roth asked.

The strengths of the present system which have developed in the absence of structured planning should not be overlooked, testified Dr. Roth.

"In our view the contemplated formal system of planning coupled with the public utility regulation cannot be justified," Dr. Roth said. "Nor should the extreme governmentally mandated system of planning and regulation be adopted without evidence that such a plan can reasonably be expected to succeed. We believe it is prudent to proceed on an experimental basis so as to determine what mix of voluntary planning together with governmentally required planning proves to be the most effective in specific regions of this country.

" . . . In view of the potentially irreversible harmful effects of the proposed system upon our health care delivery system, we urge this committee to reject any such proposal."

Dr. Roth was accompanied by James Sammons, M.D., then chairman of the AMA board of trustees and now Executive Vice-President designate.

* * * *

Congress has dealt a mortal blow to the Administration's plan to continue wage-price controls on physicians, hospitals and nursing homes after April 30.

The Senate Banking Committee voted 11 to 4 against a compromise plan that would give the Administration standby authority to keep con-

trols on some industries after the April 30 cut-off when the controls program expires. The Committee then unanimously voted to kill the Administration program to keep the lid on health while freeing the rest of the economy.

House Banking Committee Chairman Wright Patman (D.-Texas) previously had predicted his panel would not move to continue controls.

Barring an unexpected shift in Congressional sentiment, the control program is dead. Health providers, led by the AMA, waged a determined assault on the Administration's program to extend controls in health, promising legal action, and urging lawmakers to drop the entire controls apparatus.

Although Cost of Living Council Director John Dunlop refused to concede defeat, talking bravely of "other options . . . being explored through appropriate legislative channels," most lawmakers agreed that the Banking Committee had sounded the death knell to the Administration's unusually insistent drive to control the health segment of the economy.

Sen. John Tower (R.-Texas), a member of the Banking Committee, said most committee Senators believed that it is "time to let the marketplace be allowed to work."

* * * *

Despite a strong labor-backed move to the contrary, the House easily approved legislation allowing self-employed people such as lawyers and physicians to deduct from federal income taxes up to \$7,500 a year provided it is placed in a qualified pension plan.

The Senate had already approved the provision — part of an overall pension reform bill — making chances of final Congressional enactment and signing into law almost certain.

The current Keogh program limitation on tax deferrals for retirement is \$2,500 not to exceed ten per cent of income. The new provision allows \$7,500 not to exceed fifteen per cent of income.

Spokesmen for the provision, including the AMA, urged lawmakers to approve on grounds the cost of living has increased dramatically since the Keogh Law was last liberalized.

The legislation for the first time imposes certain limitations on corporate retirement programs including those for so-called profesisonal

service corporations. Tax deferrals will not be allowed on savings that would exceed a pension that brings in more than 75 per cent of highest earnings over a three-year period or \$75,000 a year, subject to cost-of-living allowances in the future. A "grandfather-clause" exempts people eligible for more than \$75,000 based on current compensation and additional period of employment.

* * * *

A total of 203 areas have been designated for Professional Standards Review Organizations (PSRO's) by DHEW, 21 more areas than tentatively proposed last December. Major change was allowing two larger states — Georgia and Washington — to operate as single PSRO areas.

The final area designations — published in the Federal Register — were handed down after a month-long review of hundreds of comments from physicians groups.

"We have now reached an important milestone in implementing the PSRO program," commented HEW Secretary Caspar Weinberger. "Local physician groups can now take the lead role in establishing PSRO's for the areas we have designated."

The most significant change in the final regulation was naming Georgia and Washington as single PSRO areas. Both states have more than 5,000 physicians, and had been divided into three PSRO sections each. In the earlier proposed regulations, HEW had indicated it would hew to the 2,500-3,000 physician limit for a PSRO area. Many states and the AMA had urged HEW to permit some states with higher physician populations to serve as single PSRO's.

Other changes included designating as a single area Hawaii, American Samoa, Guam, and the Trust Territories. These Pacific areas had been proposed for two PSRO's.

Increases or decreases in the number of PSRO areas within states accounted for the remainder of the changes. Texas was increased from 8 to 9 areas; Michigan from 8 to 10; Florida from 8 to 12; and California from 21 to 28; and Wisconsin decreased from 4 to 2.

In addition, Illinois from 7 to 8; Indiana from 5 to 7; Maryland from 5 to 7; New York from 14 to 17; North Carolina from 4 to 8; and Ohio, 9 to 12.

All told, 31 states and territories will serve as single PSRO's; 22 as multiple PSRO's.

HEW invited applications for contracts from qualified physician organizations to plan PSRO's, to begin operation of PSRO's on a conditional basis, or to establish statewide organizations to provide support services to local PSRO's.

"We believe that PSRO's which are to be planned, operated and controlled by private physicians can significantly improve the quality of medical care rendered in institutions to beneficiaries of government health programs," said Weinberger.

"For this reason, we have proposed that PSRO's be expanded to monitor the quality of all services provided under the Comprehensive Health Insurance Plan which President Nixon recently submitted to Congress."

The head of the PSRO program said the new statewide Support Center Plan would give large state medical societies essentially what they sought in their fight for single-state PSRO status.

Henry Simmons, M.D., told AM NEWS that the larger states never intended to do the review and standard setting on a statewide basis. According to Dr. Simmons, those states wished to provide the leadership and support for PSRO in their states. "Now that makes a good deal of sense," the Deputy Assistant Secretary of Health said.

"We see it (the statewide Support Center) as a way in which state organizations can provide very important leadership and very important services centrally and that makes a lot of sense from our standpoint from the standpoint of efficiency," Dr. Simmons said. "We see them as providing a very important role in getting the PSRO program started in their states, using goodwill and leadership in educating the profession . . ."

The Statewide Support Center idea was one of the major new announcements in the final PSRO area designation rules.

Dr. Simmons was asked why Texas and other state societies from large population states were turned down in their bid for single PSRO area designations and why Georgia and Washington were picked.

He said Texas is too big and diverse. "There

are too many major areas in that state which just don't relate to one area for medical services — thus (it) cannot be designated as a single-state area."

By contrast, according to Dr. Simmons, in both Georgia and Washington "there is a concentration of specialists and a majority of physicians in one particular area — in Georgia, the Atlanta area; in Washington, the Seattle-Takoma-Bremerton area."

Though present PSRO areas might be changed in the future, Dr. Simmons indicated there was little chance any of the larger states would qualify to join Georgia and Washington as single-state PSRO areas. He said those two states, with more than 5,000 physicians each, were at "the upper limit" of physician population for a PSRO area.

* * * *

Within hours after Drs. James Sammons and Richard Palmer, representing the AMA board of trustees, pressed a call upon energy czar William Simon with respect to the effect of gasoline shortages on physicians and their care of patients, Simon wired a statement to all state governors suggesting that they establish a special rule to assure adequate gas for medical personnel, and other essential public services.

The statement read in part: "State and local governments may want to consider establishing such a procedure where long lines or early gas station closings could limit the mobility of doctors, nurses, and other medical personnel in providing medical services. Special accommodation also might be considered for those who provide other vital public services.

"I urge your consideration of need for special arrangement to assure gas to all those who perform these essential public services, when it is necessary to their work."

* * * *

CANCER SOCIETY EDUCATION SERVICES

The American Cancer Society has announced that its audiovisual materials for Professional Education and for Service and Rehabilitation are now available under a lease plan to institutions, organizations and personnel in the health professions.

The lease contract is for five years at nominal fees. It is designed to supplement, but not to replace, the Society's short-term free-loans of its materials through its Divisions and Units.

These medical motion pictures and audio tapes can help to provide authoritative information about many aspects of cancer. Leased, they can be kept at hand on a year-round basis. Films for professional viewers include *"Cancer of the Larynx and Hypopharynx"*, *"Early Cancer Detection in the Physician's Office"*, *"Emotional Reaction to Cancer in Clinical Practice"*, *"Nursing Management of the Patient with Cancer"*, *"Radiation Therapy in the Management of Cancer"*, and more than two dozen other titles, with new ones in production. Most are in color and are available in 16mm and several types of 8mm cartridges. These same programs will soon be available on color videocassettes in the three-quarter inch "U-Matic" format, for playback on TV sets.

Also available are several short motion pictures for patients, to provide information and psychological reassurance. These are designed to be shown to an individual patient on his physician's order, at an appropriate time pre- or post-operatively, in the hospital or in the physician's office.

An 8mm cartridge-film projector on a hospital cart can be wheeled to the patient's chair or bedside and handled by the patient himself. Earphones can be used to insure privacy. Among the titles for patients are *"People With Colostomies"* and *"Recovery After Mastectomy"*.

For titles of materials and for more information on their lease or short term loan, contact the local Division of the American Cancer Society. (The lease option does not apply to audiovisual materials for the general public, which continue to be available only on free loan.)

ODYSSEY HOUSE OPENS LOUISIANA BRANCH

Odyssey House of Louisiana has been opened at 1125 North Tonti Street, New Orleans for the treatment and rehabilitation of drug addicts. It is one of 33 treatment facilities in six states: Michigan, New Hampshire, New Jersey, New York, and Utah.

The philosophy underlying the program is that drug addiction is a symptom of a self-destructive psychologic disorder. Therefore, to cure the addict his personality must be restructured so that conventional personal growth replaces drug

dependency. This is best done in an in-residence therapeutic community wherein no substitute drugs are used; absence of drug use is assured by witnessed urine screening three times a week, and there is continuing supervised open-group confrontation among residents that forces them to face the reality of themselves, their peers and their environment.

Duration of treatment is 18 months under the supervision of a staff which is 50% professional and 50% trained ex-addict graduates.

Odyssey House claims that 98% of its graduates remain drug-free and points to their \$12,000 average yearly income as evidence of their total rehabilitation; they further state that 85% of those who leave the program against medical advice after only 6 months of treatment remain drug-free.

There is no charge for the treatment, practically all support is generated from outside sources.

No one is refused induction—there is always room for one more.

For further information about the program telephone (504) 821-9211; ask for Mrs. Margaret Pike, R.N., or Frank Lemons.



ANSWER—Electrocardiogram of the Month

Atrial fibrillation with a fast ventricular response. There are frequent premature beats which on first blush look as if they might be premature ventricular beats. However, they show a Right Bundle Branch black with left anterior fascicular black pattern—rsr in V_2 and deep S wave in II. In addition they are coupled at a short R-R interval generally 0.36 to 0.38 seconds. Note particularly the long R-R interval that occurs in the beat immediately preceding the short R-R interval with the aberrantly conducted beat. There is considerable evidence that the conduction system of the heart tends to "have a memory"—that is, the preceding heart rate sets the system up for subsequent beats. If the basic rate is fast, then the conduction system of the heart is tuned up to conduct and recover fast. If the basic rate is slow, the conduction system is tuned down and takes longer to recover. This "memory" lasts for only 1-2 beats. Thus the long R-R interval sets the conduction system up to be a bit lethargic in recovery, so that the next quick beat is conducted aberrantly.

With this in mind, we felt the patient was not having premature beats on the basis of digitalis intoxication. We therefore gave him another 0.2 mg Lanatoside C i.v. and he converted to normal sinus rhythm.

THINGS



TO

COME

Liver Disease Course Offered

The Department of Medicine of the University of Miami School of Medicine in Miami, Florida, will sponsor a postgraduate education course on "Diseases of the Liver", November 21-23, 1974. The course location will be the Playboy Plaza Hotel in Miami Beach. Tuition will be \$150; for physicians in training \$75; and for nurses \$50. Direct inquiries to: Leon Schiff, M.D., Professor of Medicine, Department of Medicine, University of Miami School of Medicine, Post Office Box 520875, Biscayne Annex, Miami, Florida 33152.

Postgraduate Course on Perinatal Medicine

A five-day postgraduate course on perinatal medicine designed to provide a review of current topics in Obstetrics and Pediatric newborn medicine, for both practicing Obstetricians and Pediatricians, is scheduled for August 12-16, 1974, at Snowmass-at-Aspen, Colorado.

The continuing medical education course is presented by the Department of Obstetrics and Gynecology, the Department of Pediatrics, and the Office of Postgraduate Medical Education, University of Colorado School of Medicine. The registration fee is \$160.

For information on the course, please write the Office of Postgraduate Medical Education, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, Colorado 80220.



O B I T U A R Y

Dr. Ellis P. Cope

Dr. Ellis P. Cope of Little Rock died at the age of 68 on April 5, 1974. He was a native of Barton, Ohio.

A fifth-generation physician, Dr. Cope was a 1932 graduate of the University of Pennsylvania

Medical School. He was a professor of Dermatology at the University of Arkansas School of Medicine for 30 years and a consultant at the Veterans Administration Hospital for 20 years. He was an emeritus staff member at St. Vincent Infirmary and staff member at the Baptist Medical Center.

Dr. Cope was a member of the Pulaski County Medical Society, the Arkansas Medical Society, and the American Medical Association. He was a life member of the American Academy of Dermatology.

Dr. Cope is survived by his widow, Mrs. Elizabeth Kithcart Cope, a daughter, a sister, and three grandchildren.

Dr. Hunter C. Sims, Sr.

Dr. Hunter C. Sims, Sr., of Blytheville died April 6, 1974, at the age of 75. Dr. Sims was a native of LaGrange, Tennessee.

Dr. Sims was a 1921 graduate of the University of Tennessee College of Medicine in Memphis. He began his medical practice in Burdette, Arkansas, in 1922 and later moved his practice to Blytheville where he retired in 1966.

He was a member of the Mississippi County Medical Society, the Arkansas Medical Society, and the American Medical Association.

Dr. Sims is survived by his widow, Mrs. Charline Rich Sims; a son, Dr. Hunter Sims, Jr.; two sisters, and three granddaughters.



PROCEEDINGS OF SOCIETIES

Baxter County Medical Society

The Baxter County Medical Society met recently honoring their member, the newly installed State Medical Society President, Dr. Ben N. Saltzman. Following cocktails and dinner, Dr. Saltzman was subjected to a "Roasting Session" with Drs. K. S. Abraham, L. A. Kelley, A. M. Grasse, and David Hall.



PERSONAL AND NEWS ITEMS

Physician Locates

Dr. Joe D. King, a graduate of the University of Arkansas School of Medicine, will begin the practice of Family Medicine in association with Dr. Edwin V. Dildy and Dr. Robert R. Sykes at the Family Clinic in Nashville in June 1974, upon completion of his residency in Family Practice at St. Vincent Infirmary in Little Rock.

Dr. Stough is Guest Speaker

Dr. Dowling B. Stough, III, of Hot Springs, was a guest speaker recently at the Tenth Annual Scientific Meeting of the American Academy of Facial, Plastic, and Reconstructive Surgery, Inc., in Palm Beach, Florida. Dr. Stough presented a paper on the subject of esthetic considerations in hair transplantation.

Dr. John Ruff Speaks

Dr. John Ruff of Magnolia recently spoke to the Magnolia Lions Club on the subject of changes created in medicine due to modern birth control techniques and abortions.

Physician Seeks State Office

Dr. Donald L. Toon of Crossett has announced that he is a candidate for the Arkansas House of Representatives from District 62. Dr. Toon recently represented the Ashley County Medical Society as its delegate to the State Medical Society's Annual Convention.

Dr. Arnold Named to Hall of Fame

Dr. William O. Arnold of Hot Springs has named to the Wisdom Hall of Fame. The Wisdom Society for the Advancement of Knowledge, Learning, and Research in Education has also awarded Dr. Arnold with the Wisdom Award of Honor for notable accomplishment in medicine.

Community Honors Local Doctor

Dr. James D. Rankin was guest of honor recently at an "Appreciation Day" dinner sponsored by the Hamburg Kiwanis Club. In attendance were over one-hundred guests. Dr. Rankin, associated with Dr. D. L. Toon, received a plaque in appreciation for his services to the community.



BOOK REVIEWS

THE MYOCARDIUM: FAILURE AND INFARCTION

Eugene Braunwald, M.D.

428 pages, HP Publishing Co.

485 Madison Ave., New York, Printed March 1974

The advance in knowledge of myocardial function has been spectacular in recent years. One of the luminaries in this field has been Eugene Braunwald; he has published numerous pioneering articles on this subject.

He has now edited a book, *THE MYOCARDIUM: FAILURE AND INFARCTION*. The different chapters of this book are written by outstanding cardiac researchers. Their names are well known to the medical public.

The book is divided into seven sections: cardiac contraction mechanisms; physiologic mechanisms in heart failure; clinical manifestations in heart failure; treatment of heart failure; athero-sclerosis and the etiology of

myocardial infarction; treatment of myocardial infarction; and consequences of myocardial infarction.

The book is well written, beautifully illustrated, and very comprehensive.

The section on cardiac contraction mechanisms is a very up-to-date review of cardiac physiology—as related to cardiac pumping function. Of particular interest is the chapter on myocardial ultrastructure.

Chapter 29 on "The Protection of Ischemic Myocardium" is of great interest to all clinicians. Braunwald and Maroko authorized this article. They outline some things as: (1) decreasing myocardial oxygen demands by propranolol ouabain, counterpulsation; (2) increasing myocardial oxygen by reperfusion, etc.; (3) enhancing anaerobic metabolism; (4) enhancing transport to the ischemic zone; (5) protection against autolytic processes.

This text is enthusiastically recommended to practicing physicians as well as cardiologists.

Alfred Kahn, Jr., M.D.

Editor, Journal of the
Arkansas Medical Society



NEW MEMBERS

Dr. Sanford Alvin Rubin

The Pulaski County Medical Society has accepted for membership Dr. Sanford A. Rubin. He is a native of Brooklyn, New York.

Dr. Rubin was graduated from Baylor University, Waco, Texas, with a B.S. degree in 1962. He was graduated from the University of Texas Medical Branch in Galveston with an M.D. degree in 1966. Dr. Rubin interned at the University of Arkansas Medical Center in Little Rock. His Radiology residency was completed in 1970 at the University of Arkansas Medical Center. He is Board Certified by the American Board of Radiology.

Dr. Rubin is presently an Assistant Professor of Radiology at the University of Arkansas Medical Center.

Dr. Wayne Lyman Rockwell

Dr. Wayne L. Rockwell is a new member of the Pulaski County Medical Society. He is a native of Harrisburg, Pennsylvania.

Dr. Rockwell attended Akron University and Hiram College in Hiram, Ohio. He was graduated from Case Western Reserve University School of Medicine in Cleveland, Ohio, in 1956. Dr. Rockwell's internship and Obstetrics and Gynecology residency training were completed at the University of Arkansas Medical Center. He completed a Radiation Therapy residency at the University of Kansas Medical Center in 1968.

Dr. Rockwell has held teaching appointments at the University of Arkansas Medical Center, 1959-60, the University of Kansas Medical Center, 1960-73, and the University of the Philippines in 1965. He is Board Certified by the American Board of Obstetrics and Gynecology.

He is currently practicing Obstetrics and Gynecology at the Woman's Clinic at 500 South University in Little Rock.

Dr. Richard Kent Alexander

The Sebastian County Medical Society has accepted Dr. Richard K. Alexander for membership. He is a native of Muskogee, Oklahoma.

Dr. Alexander received his B.S. degree from Northeastern State College, Tahlequah, Oklahoma, in 1955. He was graduated from the University of Oklahoma School of Medicine in Oklahoma City in 1959. His internship and residency work in Internal Medicine were completed in 1961 at Mercy Hospital in Oklahoma City. He was in private practice in Poteau, Oklahoma, for twelve years.

Dr. Alexander is practicing general medicine at Sparks Regional Medical Center in Fort Smith.

Dr. Hassan M. Masri

Dr. Hassan M. Masri is a new member of the Sebastian County Medical Society. He is a native of Damascus, Syria.

Dr. Masri received his M.D. degree in 1967 from the Damascus University School of Medicine. He completed his internship and Gastroenterology residency at Huron Road Hospital in Cleveland, Ohio. He also completed a Gastroenterology residency at Tulane University in New Orleans, Louisiana.

Dr. Masri is associated with Holt-Krock Clinic in Fort Smith and practices Gastroenterology.

Dr. Joe Knight Bissett

The Pulaski County Medical Society has added the name of Dr. Joe Knight Bissett to its membership roll. He is a native of Austin, Texas.

He received his B.S. degree from the University of Arkansas in 1961 and was graduated from the University of Arkansas School of Medicine in 1965. His internship was completed at the University of Arkansas Medical Center in 1966. His Internal Medicine residency training was taken at the University of Arkansas Medical Center in 1966-67 and 1968-69. He also completed residency training in Internal Medicine at the University of Iowa Hospital in Iowa City.

Dr. Bissett is Board Certified by the American Board of Internal Medicine. He is a member of the Arkansas Thoracic Society. Dr. Bissett is a Cardiology instructor at Veterans Administration Hospital and the University of Arkansas School of Medicine in Little Rock.

Dr. John Charles Holder

Dr. John C. Holder is a new member of the Pulaski County Medical Society. He is a native of Richmond, Indiana.

Dr. Holder's pre-medical education was completed at Earlham College in Richmond, where he received an A.B. degree in 1961. He was graduated from the University of Tennessee College of Medicine in Memphis, in 1964. His internship training was completed at the University of Tennessee Hospitals in Memphis. In 1969, he completed work in his Radiology residency program at the University of Minnesota Medical School in Minneapolis. He is Board Certified by the American Board of Radiology.

Dr. Holder is an Assistant Professor of Radiology at the University of Arkansas Medical Center in Little Rock.

Dr. Jimmie G. Atkins

The Sebastian County Medical Society has added to its membership roll the name of Dr. Jimmie G. Atkins. He is a native of Dallas, Texas.

Dr. Atkins graduated from Baylor University in Waco, Texas in 1965, with a B.A. degree. He was graduated from the University of Tennessee College of Medicine in Memphis in 1969. Dr. Atkins completed both his internship and residency work at Baylor Medical Center in Waco.

He is now practicing Obstetrics and Gynecology at 314 North Greenwood in Fort Smith.

Dr. Richard Paul Kradel

Dr. Richard Paul Kradel has been accepted for membership in the Sebastian County Medical Society. He is a native of Millvale, Pennsylvania.

Dr. Kradel graduated from Rutgers University, New Brunswick, New Jersey, receiving his B.A. degree in 1961. He received his M.D. degree in 1965 from the State University of New York Upstate Medical Center in Syracuse. His internship and residency training were completed at General Hospital in Rochester, New York. He was in the United States Army at Fort Hood, Texas, from 1969-71. Dr. Kradel is Board Certified.

Dr. Kradel is associated with Cooper Clinic in Fort Smith practicing Obstetrics and Gynecology.

Dr. Robert E. Lynch

The Sebastian County Medical Society has accepted for membership Dr. Robert E. Lynch. He is a native of Wichita, Kansas.

Dr. Lynch graduated from the University of Tulsa with a B.S. degree in 1963. He was graduated from the University of Oklahoma School of Medicine in Oklahoma City in 1967. His intern-

ship and residency training were completed at the University of Oklahoma Hospitals. Dr. Lynch served in the United States Army from 1971-73 at Bangkok, Thailand. He is Board Certified by the American Board of Internal Medicine.

Dr. Lynch is associated with Holt-Krock Clinic in Fort Smith practicing Internal Medicine and Cardiology.

Dr. Juan Sanchez-Humala

The Faulkner County Medical Society has added the name of Dr. Juan Sanchez-Humala to its membership roll. Dr. Sanchez is a native of Lima, Peru.

Dr. Sanchez attended San Marcos University in Peru and received his M.D. degree from San Marcos University Medical School in 1965. He completed rotating internships at the San Marcos University affiliated hospitals in 1965 and at Philadelphia General Hospital in 1968. His residency work was done at the University of Arkansas Medical Center in Little Rock. Dr. Sanchez is Board Certified in Ophthalmology.

Dr. Sanchez is practicing Ophthalmology at 1504 Caldwell Street in Conway.

Dr. John Richard Doss

Dr. John Richard Doss has been accepted for membership in the Faulkner County Medical Society. He is a native of Portsmouth, Virginia.

Dr. Doss attended the University of Arkansas and received his B.S. degree from the Arkansas Polytechnic College in 1968. He was graduated from the University of Arkansas School of Medicine in 1972. He received his internship training at Letterman General Hospital in San Francisco while serving in the United States Army.

Dr. Doss is in Family Practice at 919 Locust Street in Conway.

Dr. Paul S. Read

The Van Buren County Medical Society has added the name of Dr. Paul S. Read to its membership rolls. He is a native of Crested Butte, Colorado.

Dr. Read received his B.A. degree from Grinnell College, Grinnell, Iowa, in 1921 and was graduated from the Nebraska University College of Medicine in 1926. He completed internship training in 1927 at Clarkson Hospital in Omaha, Nebraska. Dr. Read was in private practice in Worland, Wyoming, for eight years, and Omaha for thirty-two years. He served in the United States Army Medical Corps from 1942-46. He is

a member of the American Academy of Family Practice.

Dr. Read is currently in Family Practice in Fairfield Bay, Arkansas.

Dr. Joe B. Crumpler, Jr.

Dr. Joe B. Crumpler, Jr., is a new member of the Pope-Yell County Medical Society. He is a native of Dallas, Texas.

He received his B.S. degree from the University of Arkansas in 1963 and was graduated from the University of Arkansas School of Medicine in 1965. He completed his internship and General Surgery residency at the University of Arkansas Medical Center in Little Rock. Dr. Crumpler served in the United States Air Force from 1970-72.

From 1972-73, Dr. Crumpler served as staff surgeon at the Veterans Administration Hospital in Fayetteville, Arkansas. He is Board Certified by the American Board of Surgery and a Candidate for the American College of Surgeons.

Dr. Crumpler is associated with the Millard-Henry Clinic in Russellville in the practice of General Surgery.

Dr. Willard H. Howard, Jr.

The Benton County Medical Society has accepted for membership Dr. Willard H. Howard, Jr., a native of Battle Creek, Michigan. He received his B.S. degree in 1963 from Andrews University. Dr. Howard was graduated from the Autonomous University School of Medicine, Guadalajara, Mexico, in 1970. Dr. Howard completed his internship at Burgess Hospital in Kalamazoo, Michigan. His Surgery residency was completed at Bronson Hospital in Kalamazoo.

Dr. Howard is practicing General Surgery at 216 North Main Street in Bentonville.

Dr. Cal Raymond Sanders

The Ouachita Medical Society has accepted for membership Dr. Cal R. Sanders. He is a native of Stephens, Arkansas.

His pre-medical education was at Ouachita Baptist University, where he received a B.S. degree in 1962. He was graduated from the University of Arkansas School of Medicine in 1969. Dr. Sanders completed his internship at St. Vincent Infirmary in Little Rock. He served in the United States Air Force from 1970-73 as Flight Surgeon.

Dr. Sanders is presently in Family Practice at 353 Cash Road in Camden.

Dr. Larkus H. Pesnell

Dr. Larkus H. Pesnell is a new member of the White County Medical Society. He is a native of Shreveport, Louisiana.

Dr. Pesnell received his B.A. degree from the University of Arkansas in 1962. He was graduated from the University of Arkansas School of Medicine in 1967. The University of Tennessee City of Memphis Hospitals was the site of his internship. Dr. Pesnell served as United States Air Force Flight Surgeon from 1969 through 1971 at Vance Air Force Base, Enid, Oklahoma. He has recently completed Pathology residencies at the University of Arkansas Medical Center.

Dr. Pesnell is practicing Pathology at 910 East Race in Searcy.

Dr. James G. Burgess

The Pope-Yell County Medical Society has added the name of Dr. James G. Burgess to its membership roll. Dr. Burgess is a native of Jennie, Arkansas.

Dr. Burgess attended Arkansas A&M College in College Heights and was graduated from the University of Arkansas School of Medicine in 1967. He completed his internship and Radiology residency at Baptist Medical Center in Little Rock. He served in the United States Air Force from 1968-70. He is a member of the American College of Radiology.

Dr. Burgess is currently practicing Radiology at 105 East 11th Street in Russellville.

Dr. Jon K. Newsum

Dr. Jon K. Newsum's name has been added to the membership roll of the Pope-Yell County Medical Society. Dr. Newsum is a native of Fort Smith. He received his B.A. degree from the University of Arkansas in 1966 and was graduated from the University of Arkansas School of Medicine in 1970. Dr. Newsum's internship was completed at the United States Naval Hospital in San Diego, California. He served two years in the United States Navy in Chicago and Key West, Florida.

Dr. Newsum is associated with the Millard-Henry Clinic in Russellville in Family Practice.

Dr. Samuel Lloyd Cornwell

The Saline County Medical Society has accepted for membership Dr. Samuel L. Cornwell, a native of Little Rock.

Dr. Cornwell received his B.A. degree in 1962 from Hendrix College in Conway, Arkansas. He

was graduated from the University of Arkansas School of Medicine in 1967. His internship was completed at Hillcrest Medical Center in Tulsa, Oklahoma. Dr. Cornwell is a member of the National Rehabilitation Society.

Dr. Cornwell is the Medical Director of the Alcoholic Treatment Service at the Benton State Hospital in Benton.

Dr. Lyn A. Goodin

Dr. Lyn A. Goodin is a new member of the Garland County Medical Society. She is a native of Santa Monica, California.

Dr. Goodin received her B.A. degree in 1962 from the University of Texas. She was graduated from the University of Arkansas School of Medicine in 1966. Her internship was completed in 1967 at St. Vincent Infirmary in Little Rock. In 1970, she completed a Psychiatric residency at the University of Arkansas Medical Center.

Dr. Goodin was on the University of Arkansas Medical Center staff in 1970 and 1971. She is currently practicing Psychiatry at the Ouachita Mental Health Center, 900 Prospect, Hot Springs, where she has practiced since 1971.

Dr. Michael N. Moody

The Baxter County Medical Society has accepted Dr. Michael N. Moody for membership. He is a native of Batesville, Arkansas.

Dr. Moody attended Arkansas College in Batesville, and was graduated with a B.S. degree from Arkansas State University in Jonesboro in 1968. He received his M.D. degree from the University of Arkansas School of Medicine in 1972. His internship was completed at the University of Arkansas Medical Center. He is a member of the Academy of Family Physicians.

Dr. Moody is associated with the Salem Clinic, Box 55, Salem, in the practice of Family Medicine.

Dr. Philip E. Duncan

The Washington County Medical Society has added the name of Dr. Philip E. Duncan to its membership roll. He is a native of Tylertown, Mississippi.

He received his B.S. degree in 1961 from the University of Mississippi. He is a 1965 graduate of the University of Mississippi School of Medicine in Jackson. Dr. Duncan interned at Vanderbilt University Hospital in Nashville, Tennessee, as well as completing a residency there. He also completed residency work at the University of

Tennessee College of Medicine in Memphis. Dr. Duncan served two years with the United States Navy, in 1967-68 in Vietnam, and 1968-69 at the US Naval Hospital in Jacksonville, Florida.

Dr. Duncan held teaching appointments at the University of Tennessee College of Medicine in Memphis in 1971 and 1972. He was also a Research Associate in the VA-NCL Lung Cancer Cooperative Study at Memphis Veterans Administration Hospital. He is Board Certified by the American Board of Internal Medicine.

Dr. Duncan is practicing Internal Medicine at the Fayetteville Diagnostic Clinic, Ltd., 675 Lollar Lane, in Fayetteville.

Dr. William Gary Darwin

Dr. William Gary Darwin has been accepted for membership in the Pulaski County Medical Society. He is a native of Hope, Arkansas.

Dr. Darwin received his B.A. degree from Hendrix College in Conway in 1955. He received his M.D. degree in 1959 from the University of Arkansas School of Medicine. He completed his internship at San Francisco General Hospital in 1960. Dr. Darwin completed a General Surgery residency in 1961 at the Veterans Administration Hospital in Little Rock. He served two years in the United States Air Force, from 1961-63. From 1963-65, he was in private practice in Morrilton. In 1966-67, he practiced Industrial Medicine at the Ford Motor Company in Trenton, Michigan. Dr. Darwin completed an Industrial Health residency at University Hospital, Ann Arbor, Michigan, in 1966.

He is currently practicing General and Industrial Medicine at 6924 Geyer Springs Road in Little Rock.

Dr. John D. Smith

The Faulkner County Medical Society has accepted Dr. John D. Smith for membership. He is a native of Camden, Arkansas. Dr. Smith attended Southern State College at Magnolia, Arkansas, and was graduated from the University of Arkansas School of Medicine in 1972. His internship was completed at St. Vincent Infirmary in Little Rock.

Dr. Smith is currently practicing Family Medicine and Surgery at 923 Parkway in Conway.

Dr. Thomas A. Robinson

Dr. Thomas A. Robinson has been accepted for membership in the Faulkner County Medical Society. He is a native of Russellville, Arkansas.

Dr. Robinson received his B.S. degree in 1968 from State College of Arkansas at Conway. Upon graduation from the University of Arkansas School of Medicine in 1972, he completed his internship at St. Vincent Infirmary in Little Rock.

Dr. Robinson is now practicing Family Medicine and Surgery at 923 Parkway in Conway.

Dr. William Volk Relyea

The Pulaski County Medical Society has accepted Dr. William V. Relyea for membership. He is a native of New York City.

Dr. Relyea attended Oswego State University in Oswego, New York, and received his B.S. degree from City College of New York in 1945. He was graduated from the State University of New York at Buffalo, School of Medicine, in 1948. He interned at Millard-Fillmore Hospital in Buffalo in 1948-49 and completed a residency in General Surgery there in 1950. Dr. Relyea was a General Surgery resident from 1953-57 at Upper New York State Medical Center in Syracuse.

Dr. Relyea served in the United States Air Force as an Instructor in Surgery. He is a member of the Air Force Clinical Surgeons, Aerospace Medical Society, and Society of Air Force Physicians.

Dr. Relyea's General Surgery practice is located at 112 North Bailey in Jacksonville, Arkansas.

Dr. L. Thomas Utley

The Crittenden County Medical Society has accepted for membership Dr. L. Thomas Utley. He is a native of Hardin, Kentucky.

Dr. Utley attended Freed-Hardeman College in Henderson, Tennessee, and received his B.S. degree from Murray State University, Murray, Kentucky, in 1962. He was graduated from the University of Louisville School of Medicine in 1966. Dr. Utley completed his internship training at St. Joseph's Infirmary, Louisville, Kentucky, and his Radiology residency work at Methodist Hospital, Memphis, Tennessee. He served in the United States Air Force at MacDill Air Force Base, Florida, from 1967-69.

Dr. Utley is now practicing Radiology at Crittenden Memorial Hospital in West Memphis.

Dr. Charles H. Paris

The Sebastian County Medical Society added the name of Dr. Charles H. Paris to its membership roll recently. Dr. Paris is a native of Memphis, Tennessee. He received his B.S. degree

in 1963 from Middle Tennessee State University in Murfreesboro. He was graduated from the University of Tennessee College of Medicine in Memphis in 1967. Dr. Paris completed a straight medicine internship and Internal Medicine residency at City of Memphis Hospital in Memphis. He served with the United States Navy from 1968-70.

Dr. Paris is associated with Cooper Clinic in Fort Smith in the practice of Internal Medicine and Gastroenterology.

Dr. John H. Brunner

The Garland County Medical Society has accepted Dr. John H. Brunner for membership. He is a native of Kansas City, Missouri.

Dr. Brunner received his A.B. degree from William Jewell College in Liberty, Missouri, in 1961. He was graduated from the Washington University School of Medicine in St. Louis in 1965. His internship and residency work were completed at Barnes Hospital-Washington University, St. Louis. Dr. Brunner was an Instructor in Surgery from 1970-71 at Washington University School of Medicine. He is Board Certified by the American Board of Surgery. He served in the United States Army at Fort Wainwright, Alaska, from 1971 to 1973.

Dr. Brunner is associated with the Burton-Eisele Clinic, 101 Whittington, in Hot Springs.

Dr. H. Thurston Black

The Pulaski County Medical Society has accepted for membership Dr. H. Thurston Black. He is a native of Thornton, Arkansas.

Dr. Black attended Hendrix College and was graduated from the University of Arkansas School of Medicine in 1946. He completed his internship at Baptist State Hospital in Little Rock and his residency training at Missouri Pacific Hospital in Little Rock.

Dr. Black practices general medicine at 123 North Van Buren in Little Rock.

Dr. Mildred Ella Ward

Dr. Mildred E. Ward has been accepted for membership in the Pulaski County Medical Society. She is a native of DeFuniak Springs, Florida.

Dr. Ward attended Florida State University, Tulane University, and Louisiana State University. She was graduated from the Louisiana State University School of Medicine in New Orleans

in 1940. She interned at Charity Hospital in New Orleans. Dr. Ward completed a General Medicine and Surgery residency at City Hospital in Pensacola, Florida, in 1942.

She was in private practice for twenty-three years in San Antonio, Texas, and has held several teaching appointments. Dr. Ward is Board Certi-

fied by the American Board of Family Practice. She is a member of the American Academy of Family Practice and Southern Medical Association.

Dr. Ward is currently an instructor at the Family Practice Center at St. Vincent Infirmary in Little Rock.



Washington County Makes Local Donations

The Washington County Medical Society Auxiliary recently presented two separate youth-oriented groups with gifts for their respective projects.

The Ozark Guidance Center, Inc., was the recipient of a \$300 donation to be used in the development of a play therapy room for the evaluation and treatment of emotionally disturbed children. The Guidance Center has received funds in past years for other projects.

Young Bridge, Inc., was presented with three color television sets for each of their area homes—Indian Trail House, Youth Attention Home, and Boy Land.

First-Aid Plaques Presented

The Boone County Medical Society Auxiliary recently presented seventeen plaques to local motels with swimming pools for display giving a step-by-step explanation of mouth-to-mouth resuscitation. Plaques were also presented to the Lead Hill Boat Dock and to the Dogpatch swimming pool.

Mrs. Mahlon Maris, President of the Auxiliary, and Mrs. Pepper Ashford advised that plaques would also be available to any industry, business, or family for \$2.50 through the Auxiliary.



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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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1300 West Sixth Street Little Rock, Arkansas

MR. PAUL C. SCHAEFER, Business Manager
214 North 12th Street Fort Smith, Arkansas

LITTLE ROCK BUSINESS OFFICE
114 E. Second St. Little Rock, Arkansas

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Student Admission Procedures at The University of Arkansas School of Medicine

Horace N. Marvin, Ph.D.*

In recent years the increasing difficulty and resultant uncertainty of admission into medical school have become acutely apparent to many people in Arkansas and in the nation. Specifically within the last five years, the number of accepted applicants has increased only 10% at Arkansas, compared with a 55% increase in the number of resident applicants. Nationally the number of applicants has doubled during the same period. An increase in the total number of applicants necessarily means that there are greater numbers with good to superior qualifications. For the 1972-73 and the 1973-74 freshman classes, there were more than enough such applicants to fill the positions available. In fact, applicants were declined outright or placed on the alternate list this past year, who would have been acceptable if places had been available. The fact that some applicants who would have been accepted in previous years have been declined has raised considerable criticism of the Admissions Committee, and the equity and thoroughness of its procedures. It, therefore, seems timely to review the admissions policies and procedures in a reasonably detailed manner and, to some extent, historically.

Admission Requirements: In its first bulletin, First Annual Announcement of the Medical Department of the Arkansas Industrial University, only the graduation requirements were mentioned; no requirements for admission were delineated. The proprietary nature of the school, dependent upon fees paid by the students, understandably resulted in emphasis on the number of matriculants rather than their quality. During this period the Medical Department accepted enrollees from among the practicing profession. Such students spent the first year attending lectures in selected subjects, and then returned to their country practices. After two to ten years,

they returned and completed the remaining subjects to receive their diplomas. Despite the laxity of students in those years, it would be difficult to deny that the profession generally, and indirectly the patients, benefitted from this rather primitive arrangement.

Six years later, the Terms of Admission were established and published as follows:

- a. Eighteen years of age.
- b. Creditable certificate of good moral character.
- c. Any *one* of the following:
 1. Graduation diploma from a good literary and scientific college and high school.
 2. A first grade teacher's certificate.
 3. Successfully pass a thorough examination in English Grammar and Composition, Mathematics, Elementary Physics or Natural Philosophy, and Latin. Initially this examination was given by officials of the medical school, but beginning in 1911 this responsibility was transferred to the State Superintendent of Public Instruction in Little Rock. An "Entrance Certificate" validated by the Secretary of the State Board of Medical Examiners of the Arkansas Medical Society was issued to all who satisfied the entrance requirements. For a number of years, such a certificate was required of a graduate of *any* medical school, in addition to a medical diploma, to be eligible for licensure examination by the Arkansas Medical Board.

Effective 1 July 1892 the American Medical College Association, later the Association of American Medical Colleges, formalized these requirements with only minor changes. In reference to the standards of admission and the

*Associate Dean for Academic Affairs, University of Arkansas School of Medicine, 4301 West Markham, Little Rock, Ark. 72205.

effectiveness of the instruction, the report of the review of the 1889-90 academic year by W. W. Hipolite, M.D., chairman of the Board of Visitors, is of interest. He said, "In my opinion the College is doing more for the benefit of the public and for our profession than is being done by our so-called medical law to regulate the practice of medicine; and that during the next decade it will do more to improve the grade of practitioners in our State than is likely to be done by any medical law which is likely to be passed and enforced."

The bulletin for the 1911-12 academic year specified for the first time the individual courses required, obtainable either in high school or college; namely, English, Algebra, Plane Geometry, and United States History, totaling seven units. An additional three units of electives were required; Biology, Chemistry and Physics were included among the electives.

With the entering class of 1914-15, one year of college work beyond the high school diploma including Physics, Chemistry and Biology each with laboratory experience became a requirement for admission. This increase in required premedical training was accomplished by action of the State Board of Medical Examiners. Because of "the general educational difficulties of this State, the Medical Department" established a five year program, the first "premedical year" of which included the three science courses mentioned previously. This arrangement was necessary for only three years, being discontinued after the 1916-17 academic year.

For admissible applicants to the 1918-19 year, a second year of college work equivalent to 30 semester hours was added as a requirement with only a foreign language, preferably French, as an additional, specified course. Not until 1947 was another increment in premedical requirements recorded. Beginning that year three years of college work or 90 semester hours were required, including specifically:

General Chemistry; 2 semesters	8 sem. hrs.
Organic Chemistry; 2 semesters	6-8 sem. hrs.
Quantitative Analysis; 1 semester	4 sem. hrs.
Physics; 2 semesters	8 sem. hrs.
Biology; 2 semesters	8 sem. hrs.
or Zoology, 1 semester and Botany 1 semester	
English; 2 semesters	6 sem. hrs.
Foreign Language; 4 semesters	12-16 sem. hrs.

Each applicant must have taken the Medical Aptitude Test, later known as the Medical College Admission Test. The requirements have changed little since that time; notably the deletion of a foreign language, and the inclusion only temporarily of College Algebra.

The rationale for specifying the premedical science courses is to provide a foundation of factual information and knowledge of techniques which the medical student in his first two years can call upon for the more advanced work of the basic medical sciences. The adequacy of this preparation can be judged on only three bases: grades obtained, the score on the science part of the Medical College Admission Test, and in a minor way on the academic quality of the courses themselves.

Of the total of 90 semester hours required, at least 48 semester hours are in electives, and by this means students are able to provide themselves with a broad educational background peripheral to the core sciences. Premedical students are encouraged to take full advantage of this option. Majors in any field are acceptable as long as the science requirements are met adequately. Although only three years are required, students are urged to complete four years of credit and obtain a degree before enrolling in medical school. This additional year provides more time for electives, and importantly adds another year of maturity. Exceptions occur, of course, but generally students with four years of premedical training perform better in medical school than do those with only three years.

For the future, the writer sees little indication for change in the admission requirements. It is true that many college and university science departments are altering the organization and content of their courses. Many chemistry courses are now including substantial exposure to quantitative concepts in general and organic chemistry. Thus the existence as well as the need for a separate course in Quantitative Analysis may disappear. Until provision for this information within other college chemistry courses becomes a general policy, Quantitative Analysis probably will continue to be a requirement.

If there be any doubt as to the relationship between premedical preparation and success in Medical School, the following data would seem to be convincing. For this purpose, attrition is

defined as the number of first year students not promoted/total number first year students.

Dates	Years	Requirements	% Attrition
1879-1884	5	None	75
1884-1910	26	Minimum of high school diploma	60
1910-1914	4	High school diploma; plus sciences	37
1914-1919	5	At least one year of college	32
1919-1917	28	At least two years of college	22
1947-1973	26	At least three years of college	11

It should be pointed out that the last value for attrition, 11%, is not the current attrition rate, but an average for the 26 years during which admission requirements have been essentially uniform. The attrition rate in recent years is much less, and suggested factors affecting it will be considered at another time.

Residency: During the early years of the medical school, nonresident applicants were accepted both as first year students and students transferring into advanced standing. It is not known whether preference was given to residents during these years, but in 1923-24 the bulletin formally stated for the first time that residents would receive preferential consideration. This statement was continued for better than two decades before it was finally deleted. The number of nonresidents admitted each year amounted to 15-20% of each class, despite the authorized discrimination.

During the war years, 1944-46, many nonresidents were accepted in response to the Navy's V-12 and the Army's ASTP programs. Nearly half of these classes were nonresidents assigned to the medical school under the military programs, as was done generally at all medical schools. Although this was a practice for only two years, classes with such large numbers of nonresidents were enrolled until June 1949. On 21 March 1949 the Arkansas Legislature effectively returned the student body to the State by approving Act 346, which provided for "a fair distribution of students at the University of Arkansas School of Medicine". This act did not refer to nonresidents specifically, nor was it necessary to do so. It simply and effectively stated that selection of *freshmen* medical students would "be accomplished competitively within each Congressional District". Applicants from counties of low population were to be given priority within each district when such applicants

certified their intent to practice medicine in a community of two thousand people or less.

With the opening of the new facilities at the present medical center and the potential for larger entering classes, specific provisions were established for the admission of students. Act 139, of the Legislature, approved 4 March 1957, provided an incremental and systematic increase in the sizes of entering classes as follows:

1957 - 1958	90 Freshmen
1958 - 1959	100 Freshmen
1959 - thereafter	120 Freshmen

The increases in excess of 90 students were to be made as scheduled unless such increases endangered accreditation by the Association of American Medical Colleges. The first 90 places were to be allocated proportionately to each of the Congressional Districts based on the population of the district. All students in excess of 90 were to be selected from the state at large. Again applicants from low population counties were to be given preference if they intended to practice in communities of two thousand people or less.

By the mid-sixties a dilemma emerged. On the one hand, the need for more physicians was being emphasized. On the other hand there were too few qualified resident applicants to fill the first year class. The latter resulted in an attrition rate that was wholly unsupportable. Through the initiative of Dr. Winston K. Shorey, Dean of the School of Medicine, and with the approval and support of the Arkansas Medical Society's House of Delegates, the issues were presented effectively. Senators Harvey and Bearden introduced legislation which became Act 59 of 1967 repealing Act 139 and allowing admission of nonresidents. The new provisions required that only the first 75 positions must be allocated among residents of the Congressional Districts, the next 15 shall be allocated to residents of the state at-large, and the rest of the positions may be assigned irrespective of residency status. Two important conditions were mandated: nonresidents in excess of the first 90 students may not exceed 15% of the total class; and, "any qualified legal resident shall have a preference in securing a position when compared to a nonresident". In each act, the wording and intent of the legislation has been directed toward admission into the freshman class. The results of this permissiveness are

tabulated below:

Year	Non-residents Applying	Accepted	Total Freshmen	State of Residence
1968-69	228	2	110	Tex-1, Mich-1
1969-70	335	10	113	Cal-1, Col-1, Mich-1, Mo-1, N.Y.-3
1970-71	332	6	111	Ala-1, Cal-3, La-1, Mo-1
1971-72	1203	3	111	Cal-1, Mo-1, N.Y.-1
1972-73	334	0	121	—
1973-74	442	0	121	—

Of the 21 nonresidents admitted during this period, 10 have graduated, 7 are presently (1973-74) enrolled and expected to graduate, 2 transferred to other schools after the sophomore year, and 2 were dropped because of scholarship. A 20% (4/21) loss seems inordinately large. It should be remembered that nonresidents were accepted in place of marginally or poorly qualified resident applicants. Experience has shown that a many times greater percentage of the latter group would have been lost if admitted.

Sex: The first woman to be admitted at the School of Medicine entered as a first year student during the 1893-94 academic year. Thereafter 1-3 women were admitted into the freshman year, sporadically until 1942 and regularly each year since then. Women have averaged about 10% of the first year class for the ten years just past. A more important analysis would be the relationship between the number of applicants and the number admitted students. Data from two series of representative years are given below:

	1944	1945	1945/46	1946/47	1947/48	Aver.
♂ Applied	143	122	95	130	264	
♂ Accepted	73	71	61	77	90	
%	51	58	64	59	34	49
♀ Applied	3	12	17	10	13	
♀ Accepted	2	5	11	4	2	
%	67	42	65	40	15	44
	1969/70	1970/71	1971/72	1972/73	1973/74	Aver.
♂ Applied	224	194	200	236	309	
♂ Accepted	109	97	100	113	98	
%	49	50	50	48	32	45
♀ Applied	10	19	18	24	41	
♀ Accepted	4	11	11	8	23	
%	40	57	61	33	52	52

Although the data would seem to indicate that male applicants were favored in the early forties and female applicants most recently, the year by year variability makes very questionable the statistical significance of the differences.

As far as admission *policy* is concerned, the first statement to appear is found in the bulletin for the 1908-09 academic year, "The Department

is coeducational, women being admitted on the same terms as men". This statement was continued for several years and then was discontinued. Since 1970, in response to the tenor of the times, a positive statement appears in all bulletins stating that applicants are selected for admission on the basis of academic qualifications and personal recommendations without reference to race, color, creed, sex, ethnic background or economic status. Strict adherence to this principle has been observed and will continue to be observed.

Ethnic Origin: Although other ethnic minorities are represented in the state's population, the admission of Blacks to educational institutions has been the focal point in Arkansas and neighboring states. Concurrently with the mounting tide of concern for equal rights, educational and otherwise, the Board of Trustees of the University of Arkansas began discussing this matter informally as early as 1944. Applications for admission of Blacks to schools in Texas, Oklahoma, and Missouri had been declined, and then became matters of court litigation. Finally an application for admission into the University of Arkansas School of Law was received, approved on the basis of satisfactory qualifications, and the first black student was enrolled. This was probably the first instance south of the Mason-Dixon line in which a person of this group was admitted to a state university for white students without a court order. Shortly thereafter a Black applied to the School of Medicine for admission into the 1948-49 freshman class, the application was approved on the basis of academic qualifications, and the student was enrolled.

Since 1948, with the exception of one year, Blacks have been accepted into each freshman class. The number admitted has varied from one to a maximum of three. No quota has existed, and the number of applicants approved is the result of the competitive ranking of each applicant.

To date, of the 45 Blacks who have been enrolled, 29 have graduated, 7 are presently in school, and 9 have failed. This 20% attrition can be compared with 11% average attrition for white students during the same period of time. Black students generally have their greatest difficulty during the freshman year, and progressively their level of performance rises during the ensuing three years. A discussion of the reasons for

the initial difficulty which later diminishes is beyond the scope of this paper. There is good reason to believe that this *initial* handicap to black medical students will no longer prevail when the total educational experience before and during college becomes comparable in content and standards to that of other students. Some notable physicians are numbered among our black graduates, including several with faculty appointments at leading medical schools, and one with an international reputation in medical science.

Great pressures to admit more students from the minority groups are being exerted today. Special programs for recruitment, remedial programs before enrollment, different standards for admission, and more elastic schedules of progress in medical school all have been suggested at the national level. Despite this the University of Arkansas School of Medicine has chosen a policy of total equity with no special advantages, but certainly no negatively discriminatory actions.

The Admissions Committee — Composition: Until 1920 there was no record of an admission committee being identified in the annals of the School of Medicine. In fact there seemed to be little need for a group to evaluate the relative quality of applicant students. Because most of the educational program was in the lecture format there was little restriction on the capability of the school to accommodate any applicant who presented the appropriate certificates and had the financial resources to meet the costs. In fact the larger the number of matriculants paying fees to individual lectures the more affluent the faculty. As the quality demanded of the educational process improved and personalized teaching was increased by greater clinical involvement, there came a time when the faculty found it could no longer meet the demands of large classes of inadequately qualified students. In fact the school was restricted to a two year school from 1919 to 1923. The bulletin for the 1920-21 session identified for the first time the Admissions Committee as consisting of the Professor of Surgery, the Professor of Chemistry and the Professor of Microscopical Anatomy. From that year, there has been a committee of the faculty charged with the onerous responsibility of selecting from among the many applicants the chosen few to enroll in school. The membership of the committee has been increased grad-

ually until now there are ten members. In selecting the members, mature and responsible representatives from the preclinical faculty, the clinical faculty, and the practicing profession are assured.

Beginning with the 1961-62 academic year, the members of the Admissions Committee were appointed by Dean Winston K. Shorey. With the exception of the chairman whose identity has been known, the members have served anonymously for these 12 years. This anonymity on the one hand has been advantageous to the committee members because they have been protected from the harassment and pressures by applicants, and those interested in applicants, with less than the purest of motives. The one paramount disadvantage of such anonymity is that in the minds of some it leads to mystery, and from mystery to overt distrust. This of course is undesirable, and so beginning with the 1973-74 year, the members of the committee are now listed with all other standing committees of the School of Medicine. This in itself cannot increase the dedication, sincerity, and objectivity of the committee membership, but may relieve the committee of mystery and distrust.

The Admissions Committee—Procedures: The University of Arkansas School of Medicine participates with about 80 other medical schools in the American Medical College Application Service (AMCAS). This service provides the prospective applicant with a standardized application form. These forms are mailed out after July first when requested by a form card obtainable from either a medical school or a premedical advisor. The applicant fills out the form, calculates his own grade point averages and returns the form with transcripts to the AMCAS office. AMCAS checks the accuracy of all calculations of grade point averages inserted in the application by the applicant and the completeness in which the form is filled out. MCAT scores are entered and/or verified. All of the information statistical, biographical and educational is stored in a computerized data bank. The applicant completes only one application, copies being made and distributed to the schools by AMCAS as directed by the applicant.

Upon receiving the copy of the application from AMCAS prior to 15 December, the student becomes officially an applicant at the University of Arkansas School of Medicine. Any applicant

claiming residence in Arkansas is sent a Residency Status form to be completed and returned to the medical school. On the basis of the information contained in this form, residency status is either affirmed or denied by a separate university committee for this purpose. If validated as a resident, a file is prepared, and all information or documents are accumulated in it.

The items included are:

1. AMCAS application.
2. Residency status form and statement of the residency status committee's decision.
3. Transcripts of all academic work, and certification of degrees awarded from all colleges attended.
4. Medical College Admission Test scores with dates of each test.
5. Premedical evaluations which may be prepared as: a form with items checked, a descriptive paragraph by the advisory committee, individual letters by premedical faculty, or modifications and combinations of these.
6. Evaluation by one or more members of the medical school's faculty.
7. Minnesota Multiphasic Personality Inventory (MMPI).
8. Other letters of evaluation not described above.

The MMPI is a device which assesses the emotional and psychological factors contributing to the personality of an individual. The extent in which characteristics are possessed by an applicant are compared with standards or norms. Deviations of significant magnitude from these norms are found occasionally (7%), and such applicants are interviewed by a staff psychiatrist. This second interview usually clarifies the MMPI result satisfactorily so that only a very few (2%) of the applicants remain under continuing question.

When all of the above items have been accumulated, the file is reviewed in its entirety by each member of the Admissions Committee, independently. The applicant is rated on a scale of 1 (undesirable) through 7 (very desirable) with a value of 4 being an average applicant. The numerical average of the 10 ratings is the basis for determining the rank order position of

the applicant. At the present time, the 121 highest ranking applicants are selected, and the next 15-25 are approved as alternates. According to an agreement reached by all medical schools, applicants approved are notified by letters mailed on the 15th of January, February, and March.

On occasion, a committee member feels that some point in an application needs general committee discussion. The procedure provides for such a discussion about an applicant prior to final decision. Also it is apparent that no member of the committee, including the chairman, has any more persuasion than another. Because of this mechanism it is much more effective if recommendations of an applicant are in the form of letters in the file for all to see rather than a telephone call to only one member of the committee.

Each member of the committee analyses each application according to individual dictates, but certain factors seem to be generally accepted. As mentioned previously under Admission Requirements, the college major has no negative selective importance. Applicants who have completed more than the minimal three years of premedical college work do have an advantage over those who have completed only the minimum. The financial resources of an applicant are totally disregarded in evaluating admissibility. It seems obvious that parental occupation or profession, social status, political influence, or family status should be irrelevant factors in judging the admissibility of applicants. Despite the fact that these criteria have not been factors for nearly a decade, the myth that they are effective continues to persist in the minds of some.

Conclusion: During the more than thirty years that the writer has been concerned with medical students at the University of Arkansas School of Medicine, the effectiveness of the Admissions Committee has been constantly evaluated. It is a fact that when the number of applicants was small and the first year's attrition was high, the primary concern was to select applicants who could "make it through". Criteria such as premedical grade point average, Medical College Admission Test scores, and premedical faculty evaluations were of paramount importance in selecting applicants with a high probability of graduating. Desirable qualities of personality have received less attention because they are more

difficult to assess in the applicant, it is difficult to defend judgments under challenge, and there has been almost no way to relate such qualities to performance in practice. Dissatisfaction with the current subordination of personal attributes to grades as admission criteria has been smoldering for some time in the minds of applicants, admissions officers, medical school faculty, and other interested and affected persons. The future will see more concern for these characteristics of personality and career goals in admission technology, and solutions will be sought. In fact the Association of American Medical Colleges has initiated and is fostering a broad study of all admissions procedures, a program known as the Medical College Admissions Assessment Program (MCAAP). This study is concerned with a great deal more than the Medical College Admission

Test which *is* being evaluated also. Many facets of premedical preparation, medical education, and medical practice will be equated, and correlations made where possible. If certain applicant characteristics can be identified as predictive of career type and quality, it may be possible (and to some, desirable) to tailor-make the medical profession by selecting the appropriate applicants. Some of us who feel individuality, non-conformity, and surprise have some redeeming virtues may hope the computer blows a fuse before this goal is attained.

Summary: The admissions requirements, the composition and procedures of the Admissions Committee, and selection criteria are described as applied at the University of Arkansas School of Medicine, currently and historically.



Postdoctoral Medical Education in Arkansas: What is a House Officer?

William G. Reese, M.D.*

Mark these statements TRUE or FALSE:

1. A House Officer is an advanced student of medicine.
2. A House Officer is not an officer; he does not work in a house; a resident is not in residence; and an intern is not interned.
3. A House Officer is qualified to practice medicine; he is learning to become better qualified to practice medicine in general and a circumscribed area of medicine in particular.
4. A House Officer is a trainee.
5. A House Officer is a hospital employee.
6. A House Officer is a member of a trade union.
7. All of the previous statements are true.
8. None of the previous statements are true.

In the previous paper on this subject¹ I made a case for the truth of the first question, and spoke to related trends. Ideally, I would answer the first three questions "true" and the last five "false." I will attempt to answer the titular question, after substituting the term "postdoctoral student of medicine" or "postdoctoral fellow in medicine" for the anachronistic term, "house officer." And I shall present data to characterize him, however named, in terms of his activities.

The terminology of question 2 is old and honorable and will probably remain. I do not protest, provided that we clearly understand that the terms can no longer be interpreted literally. Certainly we in medicine know what a house is, but the fact is that interns and residents are just as frequently in ambulatory settings as in hospitals. In working with patients, they are more often team leaders and players rather than "officers" even in military settings; and residents are no longer required to live in (or to be celibate). These terms derive from the great teaching hospitals and therefore identify interns and residents more with the hospital and less with

the academic school. I do strongly object to the relatively new, probably federally-invented, term "trainee." My old "Chief" (another interesting title) insisted that "training" is only appropriate for severely retarded humans and for lower forms such as dogs and horses.

Interns and residents around the country who organize for collective bargaining adopt tools which are more appropriate for employees than for professional students—however honorable and justifiable their aims. I do *not* suggest that a given Housestaff (if you will pardon the expression) should lack organization and channels of communication, nor that they should avoid appropriate liaison with their colleagues elsewhere. I *do* seriously question the collective bargaining approach as an alternative to collaborative rational exploration and decision. (The unionization of university faculty members, as in New York, is even more alarming.)

Other members of "the establishment" take equally untenable positions. For example, some have proposed that Housestaff be permitted to practice only under supervision and only in the institution responsible for their training. The proposal would limit licenses of housestaff until completion of graduate training. The AMA House of Delegates, meeting in December 1973, referred this matter to appropriate Councils and to the Board of Trustees.² Such attempts to control through artificial means imply that a resident lacks sufficient judgment and maturity to restrict his interventions to areas of competence. *Every* physician has the responsibility of self-imposed restriction of activity. Interns and residents are supervised *appropriately*, but they cannot fully develop their capacities unless individual responsibility increases proportionate to experience and ability.

HOW DO INTERNS AND RESIDENTS INVEST THEIR TIME?

How much time is invested each week by interns and residents in the process of advancing their education, and what do they do with this

*Professor and Chairman, Dept. of Psychiatry, and Associate Dean for Postdoctoral Medical Education, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205.

time? Eleven previous studies have answered this question more or less unsatisfactorily. We shall add a twelfth which, in our biased opinion, is at least no less satisfactory than the others. Gordon K. Bohn³ with several high-level sponsoring groups, is coordinating what appears to be the first well designed representative study of distribution of effort by interns and residents in scientifically selected and sampled centers across the country (possibly including UAMC). Table 1 is extracted from Bohn's summary of prior studies. He comments that "since each of these studies had a different purpose, and were carried out with different levels of sophistication, comparison of the results of these studies reveals substantial variations and makes determination of a norm quite difficult—if not impossible." Despite some concern that the data might be misunderstood or misused, Bohn authorized reproduction in this paper provided that the ranges, as shown in parenthesis, be included.

Method. For our study, each of the 223 UAMC interns and residents, including 12 *predoctoral* residents in Family Practice (1), was asked to keep a careful log of his or her activities for the full week of December 8-15, 1973, and to return this data with a completed questionnaire. For each half-hour of the seven 24-hour days he was asked to assign the *total* half-hour to the one, of the twenty defined and designated activities, which was most nearly characteristic of the period. The items were distributed between the following main categories: learning for (1) patient care activities, (2) other educational activities, (3) formal research, (4) teaching, (5) administrative activities. One example of a patient care activity is "medical record keeping." Although

we analyzed each item, we shall restrict our report to the major categories. The following are samples of our detailed instructions:

1. "Assign all activities involving direct patient care to the appropriate item in that category, even though such activity may contribute to your learning in a major way." (This is the major learning method.)
2. "Assign all of your teaching time (and time in preparation for teaching) to a teaching category, even though you may be learning more than you are teaching." (An excellent way to learn.)
3. "Assign study time in preparation for a patient care conference to a learning category (unless you are the main teacher for the conference)."

A few of the respondents refused to be forced into an all-or-none choice and assigned the same period to multiple functions; in such cases the time was divided equally between the categories designated.

Results from Analysis of Logged Time. The main results of our study are presented in the middle two-line block of Table 2, with logged data in the top line and questionnaire data in the bottom line of this summary block. The data in the top block serves the purpose of (1) characterizing the intern/resident population and their distribution between 17 programs (first column); and (2) indicating the sampling limitations of the study (second and third columns). The other columns show program by program comparisons. Part of Bohn's Summary, Table 1, is repeated in the bottom block of Table 2 to simplify comparison of his data.

TABLE I (3)

	<u>Interns</u>	<u>Residents</u>	<u>Intern Resident</u>	<u>All</u>
Patient Care	69.8% (55.0-75.0)	54.4% (47.0-68.0)	71.4% (60.3-74.1)	67%
Education	23.1% (9.7-36.5)	36.5% (31.0-40.0)	11.1% (7.5-20.7)	18%
Research	--	1.6% (0-2.0)	0.5% (0-3.7)	1%
Personal	6.4% (1.6-25.0)	7.5% (1.4-14.2)	17.0% (1.6-23.2)	14%
Sample Size	69	334	1037	1440
Avg. Hrs./ Wk.	65	73	73	73

Analysis of the log sheets showed that the statistically average "House Officer" invested 60 hours per week in professional/educational activities (standard deviation, 17.5). He divided his time as follows: 44.9% (S.D. 22.5%) learning

with patients; 45.5% (S.D. 20.6%) learning from various other kinds of educational activities; 5% learning by teaching; 4% learning through research; and a fraction of one percent in administrative activities. (The time for adminis-

DISTRIBUTION OF TIME BY INTERNS AND RESIDENTS
University of Arkansas Medical Center by Program

	Popu- lation	Sample size	%re- sponse	Hours/ week	Percentage of time spent in:			
					Patient care	Other learning	Re- search	Teach- ing
ANESTHESIOLOGY	5	0	0		-	-	-	-
DERMATOLOGY	7	3	43		40	56	0	2
FAMILY PRACTICE	21	3	14		59	39	0	2
INTERNAL MEDICINE	43	12	28		43	49	0	7
NEUROLOGY	6	3	50		48	48	0	3
NUCLEAR MEDICINE	1	0	0		-	-	-	-
OB-GYNECOLOGY	12	1	8		41	41	0	0
OPHTHALMOLOGY	12	8	67		40	29	28	1
PATHOLOGY	12	0	0		-	-	-	-
PEDIATRICS	17	3	18		42	42	0	5
PSYCHIATRY	8	6	75		48	38	0	8
RADIOLOGY	14	6	43		55	45	0	0
SURGERY/SPECIALTIES	54	10*	19		45	50	0	4
ROTATING INTERNS	11	3**	27		-	-	-	-

Summary of Total UAMC Group as a Unit

TOTAL SAMPLE - ACTUAL	223	58	26	60	44.9	45.5	4.0	5.0
- IDEAL	223	51	23	-	45.5	36.1	-	12.5

Prior Studies (3)
(See Table 1 for ranges)

INTERNS	-	69	-	65	69.8	22.0	0	-
RESIDENTS	-	334	-	73	54.4	36.5	1.6	-
INTERN/RESIDENT	-	906	-	73	71.2	11.3	0.5	-

*General - 4; Neuro. - 1; Orthopedics - 1; ENT - 2; Urology - 2.
**Medicine -2; Dermatology - 1; Radiology - 1. Time distribution is including with assigned program during sample week.

TABLE 2

tration confirms my view that "House Officers", except for Chief Residents, have very little officerial function.) The research time was accounted for almost completely by ophthalmology residents whose program included a research block. Note that the mean percentages in the middle block were obtained by averaging the percentages for each individual in the total sample *as a unit* (and not by averaging the separate by-program percentages of the top block).

The considerable variation, shown by the large standard deviations, indicates that interns and residents vary considerably in their activities and in the amount of time they invest (or at least report). In short, the concept "average House Officer" has little real meaning. Despite the large individual variation, note the similarity of distribution of time from program to program.

Although the other studies report a larger investment of hours per week, consider the fact that our respondents were asked to log only that portion of on-call time in which they were actively engaged (seeing patients, working on records, studying, etc.). How much time can one invest before reaching the point of negative return? The range of reported activity from 30-87 hours/week is rather remarkable, since we corrected our figures for sick leave and vacation time. Are these extremes a function of over-work, under-work, accuracy or honesty? Alternatively they may be a measure of confidence in the author who assured the respondents that their individual reports would be kept from program directors and others.

Results from questionnaire. The sample week was considered by 80% of the respondents to be "reasonably representative" of their usual activities; and 85% indicated medium to high confidence in the accuracy of logs. On the average they estimated that 39% of patient care activities were independent of *direct* supervision. Seven percent of the respondents said they were under-supervised and four percent over-supervised; thus 89% were satisfied in this regard. The mean time for "activities more appropriately performed by others" was 12%, with some comments indicating that this included professional activity as well as "scut work."

The respondents were asked to indicate the "ideal" distribution of time between the major categories (see Table 2, last line of middle block).

A very small number included research in the wish list. Although the *means* for the actual and ideal distribution were almost identical for patient-care time, less patient time was desired by 45% and more by 25%. The other 30% of the respondents matched real and ideal within $\pm 4\%$. In general those who desired less time wanted to offset this with more time for other kinds of learning activities, including student teaching.

Critique of Survey. We asked our busy interns and residents to complete a rather demanding task with little or nothing for them to gain personally. Although disappointing, perhaps it is more remarkable that 26% responded than it is that 74% did not. For convenience we have called the 26% a "sample." Is it a true sample? Obviously volunteers differ from non-volunteers in any study. We can only hope that the difference between compliers and non-compliers are not particularly germane to this particular study. Are the respondents proportionately distributed by program and level? The answer is negative, inasmuch as the percent response by program level varied from zero to 75%.

Only one finding *suggests* that our time distribution figures may indeed be valid and representative: the consistency of time distribution from program to program is good as to patient care and not bad for "other learning." For the former the average of program means is 46.1% (S.D., 6.5%). For "other learning" if we eliminate Ophthalmology because of exemplary but atypical research investment, the mean of means is 45.3% (S.D., 5.9%).

Is the sample distribution by year-level satisfactory? Yes, reasonably so, as follows: pre-M.D., 25%; straight and rotating interns, 21%; then consecutively from first to fourth year residents, 35%, 28%, 22%, and 30%. The residents of the four years constitute 70% of the total house-staff.

If any better data were available, our results would not deserve dissemination. I do have more confidence in these results than those from a 100% sample of *estimated* distribution of activity.

SUMMARY AND COMMENT

What is a House Officer? He is, in the main, an advanced postdoctoral student of medicine, and not literally a House Officer. He is a phy-

sician who is learning to be a better physician, for the benefit of his patients and himself. In a scholarly, scientific, therapeutic environment (at least ideally), he concentrates in a more or less circumscribed field. Depending upon the field, the breadth of his study is inversely proportional to the depth. Secondarily, he is an essential component of a health delivery/learning system known as a teaching hospital.

We attempted to expand our answer by determining the kind of activities which are characteristic of UAMC interns and residents. We asked them to log by half-hour segments all professional/learning activities during a designated full week. On the basis of these logs, we conclude that:

1. One-fourth of our interns and residents were willing to comply and did.
2. These 58 participants, reasonably distributed by level of education but not by specialty program, vary considerably in the amount of weekly time invested and in the ways in which they invest it.
3. The average UAMC House Officer (purely a statistical construct) invests 60 hours per week in *active* learning/professional activities. Irrespective of his particular specialty program, about 90% of his time is about equally divided between learning through patient care and learning through other educational activities. Teaching activities and research activities split nine percent of his time about equally, leaving very little ascribed to administration (officership). Sampling deficiencies make it impossible to assert with confidence that these pseudo-quantitative findings are representative

but, in the words of an old refrain, they "will have to do until the real thing comes along."

I have been appropriately modest in interpreting the survey data; but I make no apology for my conceptual answer on this and the previous paper,¹ to the titular question: what is a House Officer?

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ELECTROCARDIOGRAM

OF THE MONTH

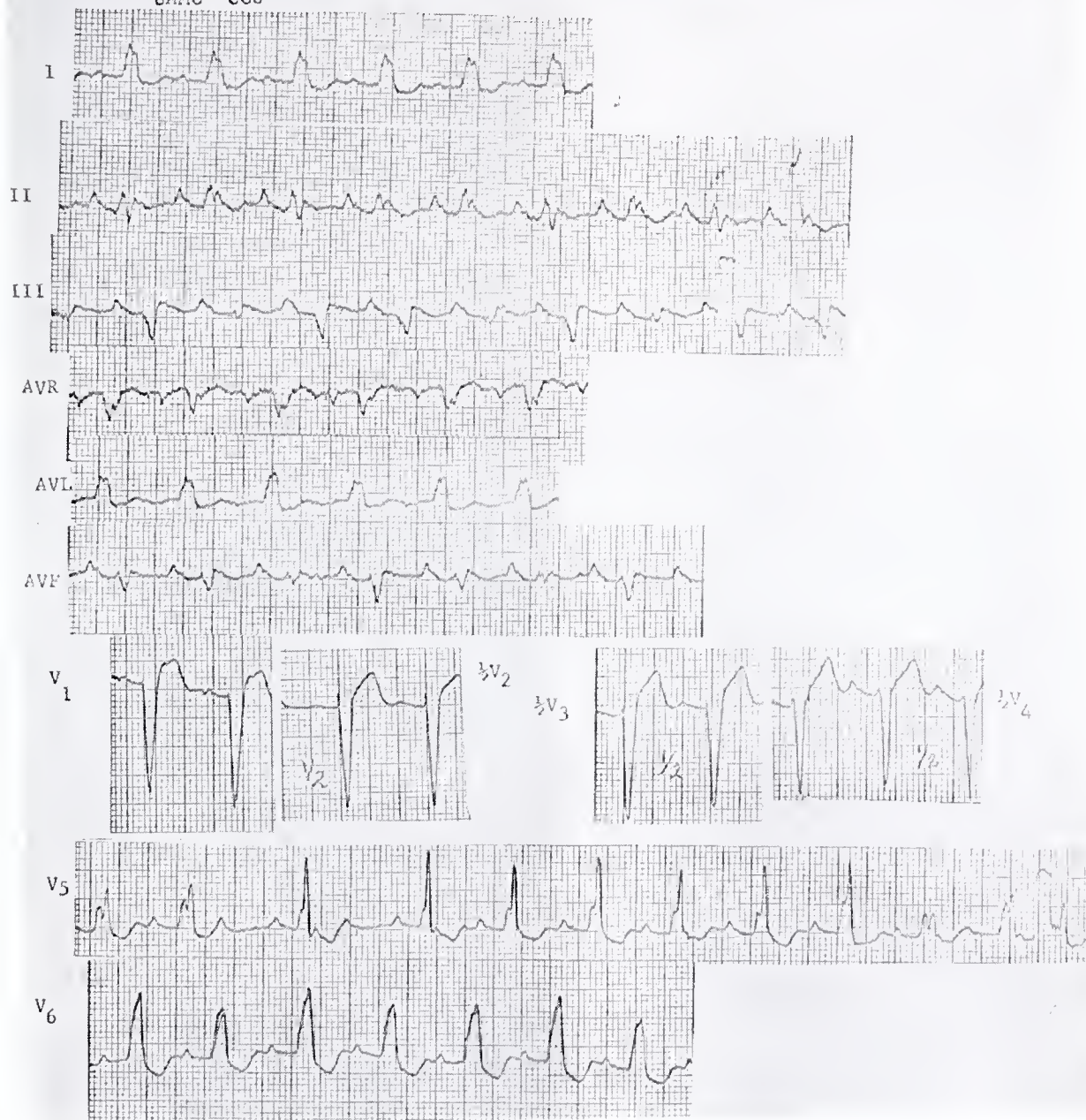
The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 98)

Aug 21, 1973

12:25 p.m.

UAMC CCU



John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Office Orthopaedics

Disability Evaluation

Kenneth G. Jones, M.D.*

Disability evaluation as determined by the physician under the statute of Arkansas Workmen's Compensation is in actuality an economic determination, since the benefits described under that law are directly proportional to the "permanent partial physical impairment" experienced by the claimant. On appeal these benefits may be modified by the Workmen's Compensation Commission or by the civil courts. Even so, it is in this instance only that the physician's evaluation of the patient's physical status actually serves as a determination of the patient's "economic disability." In all other medico-legal situations, the physician's opinion as to the extent of the physical damage experienced by the claimant must serve the singular purpose of determining the extend of the "permanent partial impairment of body functions", and should be given as such. It is the prerogative of attorneys to argue the extent of the claimant's "economic disability" resulting from that permanent partial physical impairment. We may anticipate that the plaintiff's advocate will minimize the future earning capacity of our patient, his client; while the defendant's attorney may feel obligated to disparage the patient's loss of ability to earn. The validity, or the lack of validity of these arguments will be determined by the court and should not be a province of the physician.

Though the doctor may have empathy for the patient's economic adversity, this must not influence the "permanent partial physical impairment evaluation" rendered by him. Should he fail to recognize this ever potential pitfall, he may inadvertently become an advocate for the

patient, or for the defendant, should his opinion be rendered at the request of the latter. It seems needless to point out, though necessary, that this is a position the physician must avoid.

Since in most instances we are called upon to render our permanent partial disability evaluations under the statute of Arkansas Workmen's Compensation it is this aspect of the problem which the author will consider.

The bulletin "Arkansas Workmen's Compensation Laws—and Rules of the Commission", a copy of which is available to the physician through the Arkansas Workmen's Compensation Commission, is a most useful guide. The evaluating physician will be most interested in Section 13 "Compensation for Disability." Under total disability it is stated that the injured employee during the continuance of such total disability is entitled to receive 65% of his average weekly wage. Loss of both hands, or both arms, or both legs, or both eyes, or any two thereof shall, in the absence of clear and convincing truth to the contrary, constitute permanent total disability. Additional (orthopedic) causes for permanent partial disability are:

Scheduled Permanent Injuries:

An employee who sustains a permanent injury scheduled below shall receive, in addition to compensation for the healing period, sixty-five percentum (65%) of his average weekly wage for that period of time set out in the following schedule:

- (1) Arm amputated at the elbow or between the elbow and shoulder, two hundred (200) weeks;

* P. O. Box 5270, Little Rock, Arkansas 72205.

- (2) Arm amputated between the elbow and wrist, one hundred fifty (150) weeks;
- (3) Leg amputated at the knee, or between the knee and the hip, one hundred seventy-five (175) weeks;
- (4) Leg amputated between the knee and the ankle, one hundred twenty-five (125) weeks;
- (5) Hand amputated, one hundred fifty (150) weeks;
- (6) Thumb amputated, sixty (60) weeks;
- (7) First finger amputated, thirty-five (35) weeks;
- (8) Second finger amputated, thirty (30) weeks;
- (9) Third finger amputated, twenty (20) weeks;
- (10) Fourth finger amputated, fifteen (15) weeks;
- (11) Foot amputated, one hundred twenty-five (125) weeks;
- (12) Great toe amputated, thirty (30) weeks;
- (13) Toe other than great toe amputated, ten (10) weeks

When the injury involves only one part or one area, as listed above, evaluation is relatively simple and easy to calculate and may be taken directly from the schedule given. However, when more than one part, or area, is involved, those multiple involvements must be correlated and related to a larger area or to the body as a whole. For example: two injured digits on the same hand must be related to that extremity below the elbow joint, while two injured toes on the same foot would be related to that extremity below the knee. In turn, disability in any two extremities would be related to the body as a whole. Injuries to the trunk and other areas are correlated in a like manner and related to the body as a whole.

Correlation must be performed by the physician and is accomplished by first determining the percentage loss of function in each separate area and then converting the percentage of loss to a weekly value by multiplying that percentage of loss times the value in weeks given in the schedule for the involved area. After the loss in weeks has been established for all involved areas in this manner, the total weekly loss is then determined by combining weekly losses. This

total weekly loss can then be related in terms of percentage with the involved extremity or the body as a whole as proper.

While this simple arithmetic is straightforward and the product thereof has a great deal of merit, it creates a never ending problem in calculation for the physician.

In actual practice where multiple areas of injury are involved the calculator will first determine to which of the areas the disability must be related. Next he must compute the total number of weeks of disability of each of the involved areas, add the weeks together for a total number of weeks after which he may multiply these weeks by the percentage weekly value factor given below to obtain the percentage of disability as related to a specific area. Or he may obtain the same result by dividing these weeks by the weekly value of the area to which he is relating the disability to obtain the same percentage of permanent partial disability.

<i>Area</i>	<i>Scheduled Value In Weeks of Each Area</i>	<i>Percentage Value of One Week of Each Area</i>
Body as a whole	450	0.22%
Arm above elbow	200	0.50%
Leg above knee	175	0.57%
Arm below elbow	150	0.66%
Leg below knee	125	0.80%

As an example, if the patient had sustained injuries to the left lower extremity which constituted a loss of 50% below the knee, then the weekly disability would be (50% of 125 weeks) 62.5 weeks. And if he had also suffered injuries to the right lower extremity which the physician evaluated as a 10% loss of function with that loss being below the knee joint, then the weekly benefit for that area would be (10% of 175 weeks) 17.5 weeks. And if, in addition, he had sustained an injury to an upper extremity which extended above the elbow joint which was estimated to be approximately 35%, he would also have sustained an additional weekly disability of (35% times 200 weeks) 70 weeks.

These three areas and these three weekly disabilities would then be added together (62.5 weeks plus 17.5 weeks plus 70 weeks) and would constitute a total weekly disability of 150 weeks which in this instance, because they are multiple, must now be related to the body as a whole. In this example it is obvious that 150 weeks is one-third (33 and $\frac{1}{3}$ %) of 450 weeks. But were the answer not so obvious, it could be calculated

readily by multiplying 150 weeks by the factor 0.22% to obtain 33 and $\frac{1}{3}$ % permanent partial disability as related to the body as a whole. Under the Workmen's Compensation Law of the State of Arkansas at the present time this would ordinarily constitute the permanent partial disability of the claimant.

Temporary partial disability is a separate and distinct entity from permanent partial disability which has been considered above. "Temporary partial disability" is intended to cover those benefits to which the patient is entitled during the healing process and ordinarily is terminated when the patient returns to gainful employment or when he is considered to have reached the end of the healing period and is awarded a permanent partial disability rating. In the case of temporary partial disability resulting in a decrease of the injured employee's average weekly wage, there shall be paid to the employee sixty-five percentum (65%) of the difference between the employee's average weekly wage prior to the accident and his wage earning capacity after the injury. As stated above this benefit is continued during the healing period and is automatically discontinued when the patient is returned to work or a permanent partial disability evaluation rendered. The physician is not called upon to render a percentage "temporary partial disability" evaluation, but he must be precise as to the date he released the patient to return to work or the date he estimated permanent partial disability.

The major problem for the physician in this area is precipitated when the physician would prefer to return his patient to a light type of employment for a specified period of time to utilize the benefits of "on the job rehabilitation" but finds that the employer will not accept the patient for this purpose. The physician is then confronted with the necessity to continuing the temporary partial disability until the patient is completely recovered or of estimating his permanent partial disability at that point. Unfortunately, either of these are undesirable alternatives in many instances. But, as physicians, we work in the framework given us, however deficient it may be.



Rondomycin®

(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines

WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**

Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)

Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.

Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)

All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.

Tetracyclines are present in milk of lactating women taking tetracyclines.

To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.

Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.

PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.

In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.

Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.

In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).

Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.

Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.

ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms) anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.

Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).

Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).

Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.

Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.

Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.

Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.

USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea. In uncomplicated gonorrhea, when penicillin is contraindicated, "Rondomycin" (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.

For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of "Rondomycin" (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.

Eaton Agent pneumonia: 900 mg daily for six days.

Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.

Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.

Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.

In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.

In streptococcal infections, a therapeutic dose should be given for at least 10 days.

SUPPLIED: "Rondomycin" (methacycline HCl) 150 mg and 300 mg capsules, syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73



WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512



What's to Hear

Carol Hopkins, PH Educator*

The telephone and doorbell ring, a car has screeching brakes, planes roar overhead, motorcycles zoom down the street, tea kettles whistle, electric mixers, blenders and vacuum cleaners whirl at all speeds and the television, stereo and radio play continuously.

Just what do all of these have in common? Only one thing — noise!

Noise, in a sense, could be compared to drug usage — some is good and some is bad. Most people, however, tend to think of “noise” as displeasing.

With the demand aiding the increase of high-powered machinery, automobiles and aircraft plus many labor-saving devices there are relatively few places one can go to hear “the sounds of silence”. Even a camping trip to a quiet lake can be interrupted by the roar of speedboats, aircraft and the distant hum of highway traffic.

People tend to be crisis oriented and the reaction to noise pollution follows this pattern. According to Dr. Alexander Cohen, a noise researcher with the National Institute for Occupational Safety and Health, “the sonic boom was a blessing”. Until the boom became threatening no one paid any attention to noise levels.

Health professionals, hearing experts and sound specialists in connection with lawyers, public officials and other concerned citizens have joined together to “fight for quiet”. Water and air pollution coupled with noise pollution may one day be something to think about, not live with.

Noise and man's physical, mental and social response to it have been of concern for many years. Industry, with heavy machinery, has always had employees who have become deaf. Industrial Hygiene Programs were developed to study on-the-job noise and recommend control

measures on a routine basis.

Office noises also are of concern. Did you ever hear the sound of 10 or 12 typewriters, plus copy equipment at the same time?

Noise surrounds us daily and no one is immune. It travels in pressure waves like ripples on a pond. Most often it is carried through the air, but can be conducted by wood, steel, glass and metals.

Quality of noise — different sounds such as the whistle of a tea kettle or the boom-boom of a bass drum — is known as the frequency.

The intensity of sound is measured in decibels. Although there are many sounds with frequencies too low or too high for the human ear, electronic instruments can measure both frequency and intensity to obtain sound levels.

Brief exposure to sound levels of 140 to 150 dB (decibels) can rupture eardrums and cause permanent hearing loss. Example of noise meter readings are: four-piece rock band, 115 dB; walking near a helicopter, 104; screaming child, 93; jet taking off, 102; traffic at a residential intersection, 82.

Concern about noise resulted in the establishment of the Federal Office of Noise Abatement and Control through sections of the Clean Air Act of 1970. The office, established four months after the Environmental Protection Agency (EPA) was formed, reports directly to the President.

In 1970, with the passage of the Occupational Safety and Health Act (OSHA), all places of employment were required to comply with an eight-hour day maximum if noise levels were 90 dB or more.

The “Noise Control Act of 1972” was passed to coordinate Federal research and activities in noise control, set up noise emission standards for commerce products and provide information to

*Arkansas Dept. of Health, Division of Public Health Education, 4815 West Markham, Little Rock, Arkansas 72205.

the public regarding noise emission and reduction.

Many regulations have been passed by both Federal and State Legislatures in the areas of major noise sources; products considered major noise sources; labeling products as to how much noise they produce; regulating noise levels of imported products; prohibiting removal of noise control or noise reduction devices; aiding development of low-noise-emission products and regulating air, rail and motor carrier noise standards.

The Federal Government also offers technical assistance to State and Local governments to help facilitate development and enforcement of ambient noise standards.

An article in the Pollution Control Guide of the Commerce Clearing House, Inc., quotes the EPA article "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety". The recently released EPA document provides a basis for state and local governments' judgments in setting standards.

"EPA has determined a 24-hour exposure level of 70 dB as the level of environmental noise which will prevent any measurable hearing loss

over a lifetime; a level of 55 dB is the level which will prevent activity interference and annoyance for certain outdoor areas where human activity takes place; and a level of 45 dB as the level which will permit spoken conversation, sleeping, working, recreation and other activities which are part of the daily human condition, in indoor residential areas, hospitals and schools. It should be noted, however, that these specified levels are not a single event or "peak" levels, but actually represent averages of acoustic energy or noise over a period of time—such as eight hours, 24 hours or several years; occasional higher noise levels are permissible as long as a sufficient amount of relative quiet is experienced for the remaining period of time."

The fore-mentioned article is available for inspection at EPA Regional Offices, Office of Public Affairs or from the U. S. Government Printing Office.

Some day noise will be either gone or drastically reduced. Still, there are things to be done.

When will people who prefer "the sounds of silence" speak up as their counterparts, the non-smokers and others, have done? We must make ourselves heard. Sometimes the quietest is the loudest.



PROCEEDINGS OF SOCIETIES

Union County Medical Society

The Union County Medical Scholarship Foundation, sponsored by the Union County Medical Society, recently held an election of officers and board members. Dr. A. R. Clowney was reelected president, Dr. Gardner H. Landers was reelected vice president, and Mrs. Frances Reibe was reelected secretary-treasurer. Board members reelected include Drs. Kenneth R. Duzan, Grady Hill, and J. S. McKinney. Dr. William Wood is a newly elected board member.

The purpose of the association, which was organized in 1962, is to provide a scholarship fund

to serve as a memorial to deceased members of the medical profession in the Union County area and to provide scholarship assistance to worthy medical students.

Since the founding of the organization, seven medical students from Union County have received scholarship assistance and of these, four have now graduated from medical school with M.D. degrees while three are still students at the University of Arkansas School of Medicine.

ANSWER—Electrocardiogram of the Month

The basic rhythm is actually atrial flutter at about 220/min (.28 sec.) with 2:1 block most of the time. The 2nd blocked F wave falls 2:1 block most of the time. The 2nd, blocked F wave falls within the end of the QRS most of the time and may be most easily recognized in the R prime of lead II, or the small notch in the initial ST segment of V1. In lead V5, the rhythm becomes less regular and appears to involve intervals where the flutter waves are blocked with a longer pause as before the 3rd QRS complex. The QRS complex is followed by 2 very rapid flutter waves, both of which block. This sequence recurs and stabilizes with flutter at 2:1 block. The QRS complexes are prolonged with a late left posterior force as occurs in left bundle branch block. The ST changes are probably secondary to the abnormal depolarization.



EDITORIAL

Some Cardiologica

Alfred Kahn, Jr., M.D.

Research in cardiology has been intensified by newer and better methods of investigating heart disease and by the advances in cardiovascular surgery. The cardiac transplants provided a great deal of impetus. Of more recent interest has been aorto-coronary grafts.

Bousvaros, Piracha, Chaudhry, Grant Older and Pifarre have written on "Increase in Severity of Proximal Coronary Disease after Successful Distal Aorto-coronary Grafts: Its Nature and Effects" (*Circulation*, Vol. XLVI, page 870, November 1972). The authors studied seven patients with incomplete coronary artery occlusions who were treated by aorto-coronary grafts; they were studied both before and after surgery. The indication for surgery was severe angina pectoris. Nine arteries were bypassed in the seven patients. After surgery, six of the nine arteries which were markedly narrowed arteries showed a "substantial increase of proximal occlusive disease, diffusely or at the points of narrowing"; there was complete obstruction in four arteries. The authors postulate that diverting the blood flow seems to accelerate the occlusive disease of the artery proximal to the graft. It is of further interest that in the proximal arteries that closed down revealed narrowing of previously unsolved segments. The article is accompanied by excellent coronary arteriograms.

The use of nitroglycerin is still being actively investigated. Gold, Leinbach, and Sanders have studied "Use of Sublingual Nitroglycerin in Congestive Heart Failure Following Acute Myocardial Infarction" (*Circulation* Vol. LXVI, page 839, November 1972). The authors point out that pulmonary congestion seen in myocardial infarction responds ordinarily to conventional therapy with Morphine, oxygen, and diuretics,

etc. Some patients do not respond to conventional therapy and Nitroglycerin was tried to see if it could decrease left ventricular filling pressure in cases of acute myocardial infarction. Studies were made in seventeen patients. The mean pulmonary wedge pressures fell from 19 MM Hg to 14 MM Hg. Cardiac output fell 9% in patients without left ventricular failure; if left ventricular failure was present, the cardiac output increased. This type of treatment affords only temporary benefit when it works, but as the authors state, it may help break the physiologic chain of events in incipient and actual pulmonary edema.

The way in which Nitroglycerin gives relief in anginal attacks has been studied extensively and many theories have been advanced, as dilatation of coronary arteries, vasodilatation of the systemic vessels, etc. Ganz and Marcus studied the effects of intra coronary Nitroglycerin on angina pectoris. Previous strides involved the use of sublingual Nitroglycerin. It was felt that administering Nitroglycerin directly into the coronary vessels, the peripheral vascular reaction would be minimized or completely obviated. Angina was induced in patient with this type of coronary disease by pacing. Nitroglycerin was injected during anginal attack. The authors concluded that there was virtually no benefit from the intra coronary injection of Nitroglycerin, and it followed that Nitroglycerin did not relieve angina from any special direct action on the coronary arteries. Ganz and Marcus felt that although Nitroglycerin dilates coronary arteries, its action was inadequate in ischemic areas to relieve pain; radioactive Xenon clearance from the myocardium subtending a narrowed coronary artery is not removed at a faster rate after intra coronary artery Nitroglycerin. Nitro-

glycerin given intravenously does relieve angina pectoris in patients in whom intra cardiac Nitroglycerin was ineffective (Circulation Vol. XLVI, page 880, November 1972).

Vatner, Higgins, Millard, and Franklin (Journal of Clinical Investigation Vol. 51, page 2872, November 1972) reported on "Direct and Reflex Effects of Nitroglycerin on Coronary and Left Ventricular Hemodynamics in Conscious Dogs." In contrast to Ganz and Marcus, Nitroglycerin was administered sublingually and intravenously rather than into the coronary arteries; also these subjects were dogs not humans. They found that Nitroglycerin had a potent vasodilating effect both directly and indirectly. The coronary blood flow is said to have increased before there was a heart rate change, arterial pressure change, ventricular dimension change, or change in myocardial contractibility.

One of the old time remedies for heart disorders was whiskey. Now it has been shown that alcohol has an adverse effect on the heart in various ways. Left ventricular function is known to be depressed by alcohol, thus it is a poor agent to use or recommend in heart failure. Why alcohol is injurious to cardiac function is not well understood. Schreiber, Briden, Oraty, and Rothschild (Journal of Clinical Investigation Vol. 51, page 2820, November 1972) studied the effects of ethanol and acetaldehyde on the heart. They found that acetaldehyde, which is a metabolite of ethanol, interfered with normal myocardial protein synthesis. Propranol (Inderal) did not effect this inhibition of synthesis. It is thus postulated, prolonged ingestion of ethanol could lead to a partial failure of myocardial protein synthesis, and this in turn could lead to the cardiac myopathy of alcoholism.



MEDICINE IN THE



THE MONTH IN WASHINGTON

Triggered by the surprise introduction of a Kennedy-Mills proposal for national health insurance and a major effort by the Nixon Administration to get its own bill through this year, the Congress has again started a hot and heavy debate on the complex issues involved.

Appearing before the House Ways and Means Committee, Russell B. Roth, M.D., president of the American Medical Association, warned that most of the congressional push for national health insurance (NHI) is based on the false premise that there is a health care crisis.

"The fact is," Dr. Roth told the Committee, "more people are receiving more and better medical care from more and better trained physicians in more and better equipped facilities than ever before in history. These are not elements of crisis. The fact also is that the public, as its opinion has been judged in various polls, does

not perceive medical service to be a major problem area.

"No doubt the Committee recalls a recent Louis Harris poll, commissioned by a Senate subcommittee, which indicated that whereas 64 per cent of the sample identified inflation as our nation's most serious problem, health care rated 15th, or next to last on the list, with only 3 per cent of the respondents putting emphasis on this. Inasmuch as any of the proposals for extensions of federal subsidies for medical service are inevitably inflationary to some degree, one wonders about the advisability of further aggravating this most serious problem in order to attack a problem of much lesser magnitude.

"Poll after poll confirms that people are generally satisfied with the type of health care they personally receive. This satisfaction relies on wide experience, for some 2.5 million people a day see a physician. A 1971 University of

Chicago study, based on a nationwide sample, found 84 per cent of the people satisfied, only 10 per cent dissatisfied. Just last month a survey commissioned by the *Washington Post* uncovered a virtually identical pattern in this area. According to Mr. Jay Mathews' story, six of every seven local residents are at least "pretty satisfied" with their medical care. Only one person in ten expressed any measure of discontent. It would be an interesting exercise to see if you could find another issue or subject these days upon which Americans would voice 85 or 90 per cent agreement.

"Reflected in the results of the polls is a record of at least ten years of substantial progress. During this period the number of American medical schools and the number of physicians available to the American public have been increasing. Physician numbers will continue to increase at a pace which exceeds the general population growth rate."

Speaking strongly in support of the AMA sponsored Medcredit bill for NHI, Dr. Roth urged the Committee to follow the guiding principles developed by the AMA in its proposed legislation.

"We are convinced," Dr. Roth said, "that financial barriers to medical services are as real for middle income persons as for the poor—that there is great virtue in attention to ability to pay deductible and coinsurance amounts—and that our graded tax-credit approach is a superior feature in adjusting subsidies to needs.

Lashing out at the Kennedy-Mills NHI proposal, Dr. Roth said, "It is one thing to mandate the purchase of private insurance by employers. It is something quite different to institute increased payroll taxes, destroy the future of private insurance and shift a well-regarded private function into a federal agency.

The financing envisioned in the Kennedy-Mills proposal gives us several problems:

"It creates a massive 4 per cent increase in the Social Security tax. Wage earners will not be deluded by the fact that 3 per cent is to be paid by employers and 1 per cent by employees. The Public is sophisticated enough to know that there is no free ride in this respect and the source of the funds to pay for such federal programs is from their compensation.

"We would point out further that under Social Security taxes, he who earns \$20,000 a year

pays the same as the person who earns 90 or 100 thousand. In our view, it would be more equitable for those who make more to pay more. We would prefer the sort of consistent sliding scale approach that is embodied in the Medcredit bill. Finally, we would seriously question the proposition that by eliminating the profit factor Social Security handling of health insurance finances will bring economies and efficiencies.

"The track record of government—our own and others as well—provides scant historical evidence that its capacity to manage surpasses private management in terms of either efficiency or economy.

"Administrative control derives in large part from financing mechanisms, and, since we advise strongly against control of a new program by the Social Security Administration, we would avoid Social Security financing.

"There can be no justification for the establishment of a vast and expensive new corps of clerks and bureaucrats dedicated to the task of complicating what should be a relatively simple program for placing in the hands of the eligible beneficiary a policy of insurance or a contract for service tailored to his needs."

* * * *

The day before the AMA testimony before the Ways and Means Committee, Health, Education, and Welfare Secretary Caspar Weinberger told committee members that the Administration is dead serious about pushing for enactment of a NHI program this year.

Secretary Weinberger came down hard on the Kennedy-Mills proposal that would move toward the federalization of the nation's health care.

Discussing the "fundamental differences" between the so-called compromise plan sponsored by Kennedy and Mills, and the Administration's Comprehensive Health Insurance Plan (CHIP), Weinberger declared:

"I would be less than candid if I did not stress how strongly we are committed to the basic principles of the CHIP proposal."

The Secretary told the crowded hearing room that "the national climate has never been more favorable for the development of a sound consensus on a national program of health insurance... I am here to urge—just as strongly as I possibly can, personally and on behalf of the Administration—that this clear chance at solid

accomplishment not pass without the nation's action.

"We firmly reject the views of those few who counsel that no action be taken until some vague future time when they believe that their own plan can be enacted. Such a time will never arrive."

A major reason for prompt action, Weinberger said, is the prospect that "the American people appear to be in for a very rough period indeed as far as health care costs are concerned." Congress' failure to approve continued wage-price controls on health could lead to a \$4 billion to \$5 billion increase in health care costs next fiscal year and \$9 billion the following year, he cautioned.

If this happens, all current cost estimates for various NHI proposals "would be far too low." He said "the Nation desperately needs measures to avoid such a pocketbook disaster."

In devising the CHIP plan, based on mandated employer health insurance plans for employees, Weinberger said the Administration believed "it is imperative to improve, rather than demolish, the present system."

Though the cabinet secretary took swipes at all the major NHI competitors to CHIP, he not surprisingly reserved most of his fire for the Mills-Kennedy compromise. This bill calls for a Social Security NHI financed by a four per cent tax and administered by Social Security as a virtually independent agency.

Mills-Kennedy, according to Weinberger, "would take a major step down the road toward complete federal financing and control of all health care in the United States.

"If that policy approach were to prevail, I feel there would be no turning back."

The financing of health care is too important to the people "to turn over to a federal bureaucracy," he asserted. Noting the complexities of the health system and the relative lack of knowledge of its workings, he said "in these circumstances the dangers of turning financial control of this vital industry over to an enormous new federal bureaucracy are considerable."

Quashing speculation that the Administration might try to reach an accommodation on the Mills-Kennedy approach, Weinberger hammered away at it, making it plain that he regarded the Mills-Kennedy plan as the big danger. He said

it would stifle private initiative "under piles of paperwork and federal regulations."

"We believe that the federal role in health financing must be clearly limited, as it is in CHIP. National health insurance should not be the nationalization of the health system."

The Administration officer said Mills-Kennedy would impose \$40 billion of new federal taxes "on top of a tax burden that many Americans already believe is excessive." Furthermore, Weinberger said, "payroll taxes are a much greater burden on the poor than is general revenue financing."

He said the Kennedy-Mills plan would virtually eliminate privately administered health insurance and substitute a fully federally financed and administered system. "Our present system should be improved upon rather than dismantled in favor of a costly, inflexible federal system."

"The budgetary impact on the federal government, Weinberger maintained, "is simply unacceptable."

* * * *

The government's procedures to assure that Professional Standards Review Organizations (PSRO's) represent physicians in their local areas have been announced.

The PSRO law requires that the HEW department before entering into an agreement with an organization to be the PSRO for an area, must notify the physicians of that area of the intent. The physicians then have the opportunity to object to a specific organization being named as the PSRO. The method to be used in notifying the nation's physicians of the proposed PSRO's and the subsequent steps to be taken in assuring that the organizations are acceptable to the physicians are detailed in the Federal Register of April 16.

"In keeping with the PSRO legislation, we have developed procedures to assure that the organizations established as PSRO's throughout the country are truly representative of the physicians in each of the PSRO areas," HEW Secretary Caspar Weinberger said. "It is the local physicians who will plan, operate and control the PSRO in each area, and, therefore, the organization designated as the PSRO must be their organization," he said.

When the Secretary has determined that a local physician organization is qualified to per-

form the PSRO functions required by law, he will notify the area's physicians and other health professionals by announcements in the local press and mailed notices to physician and hospital organizations active in the area. The notice will also be published nationally in the Federal Register.

The notice will announce the Secretary's intent to enter into a financial agreement with a specific organization, describe the organization, and indicate that active, practicing physicians in the area have 30 days in which to protest the proposed selection. If less than ten per cent of the local area's doctors object to the proposed organization, the law provides that the Secretary can designate and fund the PSRO that he has chosen. However, if more than ten per cent do object, the Secretary will conduct polls of the physicians in the area. HEW will mail a ballot to each doctor who practices in the area on which he can indicate whether the organization provisionally selected by the Secretary does or does not represent him.

A 30-day period will be allowed for the ballots to be returned. If more than 50 per cent of the respondents to the poll indicate that the organization does not represent them, the Secretary will no longer consider that organization for PSRO designation. If less than half object, the Secretary, by law, can conclude his agreement with the local PSRO.

* * * *

The government has labeled as "factually inaccurate and misleading" a kit on Professional Standards Review Organizations (PSRO's) prepared by the American Medical Association.

In a critique of the kit, the Health, Education and Welfare Department said many of the PSRO review functions actually are embodied in the Social Security Act's Medicare and Medicaid provisions that were approved long before PSRO.

The HEW paper contends that the purpose of PSRO "was to give practicing physicians priority in undertaking the review of care provided rather than have the review performed by those outside the medical profession."

Contents of the kit, entitled "PSRO—DELETERIOUS EFFECTS," have been criticized by HEW and Senator Wallace Bennett (R., Utah),

chief Congressional sponsor of the PSRO provision. The kit was prepared and distributed by the AMA at the behest of the AMA's House of Delegates to alert the medical profession to the dangers of such a review system.

* * * *

Theodore Cooper, M.D., has been appointed deputy to Assistant HEW Secretary for Health, Charles Edwards, M.D. Dr. Cooper is director of the National Heart and Lung Institute. Henry Simmons, M.D., who has been serving as Dr. Edwards' right hand man, will continue to hold a deputy position but will concentrate henceforth most of his efforts at directing the Professional Standards Review Organization (PSRO) program. Dr. Cooper is regarded as one of the government's most able health officers. One of the first heart transplant researchers, he is a renowned expert on the heart.

* * * *

John Chase, M.D., a Veterans Administration career medical official for 22 years, has been appointed Chief VA Medical Director. VA Administrator, Donald Johnson, also announced the appointment of Dr. Laurance Foye, Jr., M.D., as Deputy Chief Medical Director of the agency. Dr. Chase is succeeding Marc Musser, M.D., who resigned. Foye replaces Benjamin Wells, M.D., who retired last January 23.

* * * *

New Medical School Dean Named

Dr. Thomas A. Bruce, a native of Mountain Home, Arkansas, and a 1955 graduate of the University of Arkansas School of Medicine, has been named the Dean of the School of Medicine at the University of Arkansas.

Dr. Bruce has been serving as Professor of Medicine at the University of Oklahoma Health Sciences Center and as Head of the Cardiovascular Section, Department of Medicine, at the University of Oklahoma College of Medicine, both since 1968. Some of his administrative duties include Chairman of the Long-Range Planning Committee, Department of Medicine, University of Oklahoma; Planning Consultant for the Robert S. Kerr Heart-Lung Institute in Oklahoma City; and serving on the Admissions Board of the College of Medicine at the University of Oklahoma. He held several teaching appoint-

ments at Wayne State University School of Medicine in Detroit, and was the Assistant Dean there for two years prior to moving to Oklahoma.

Following completion of a special Program for Health Systems Management at Harvard University Graduate School of Business Administration

in July, Dr. Bruce will assume full time duties at the School of Medicine in Little Rock.

He is married to the former Dolores Fay Montgomery of Port Arthur, Texas. They have two children, T. K. Montgomery Bruce, age eleven, and Dana Fay Bruce, age eight.



PERSONAL AND NEWS ITEMS

Physician Enters Art Work

Dr. Howard S. Stern of Pine Bluff was the senior alumnus among thirty-seven University of Arkansas at Little Rock artists in their recent alumni art exhibition. Dr. Stern's three watercolors were among ninety entries.

Physician Relocates

Dr. Hugh A. Nutt is now associated with the Howard-Dobson Clinic in Fordyce, with Drs. H. H. Atkinson, John H. Delamore, Jack T. Dobson, E. E. Estes, and Don G. Howard. Dr. Nutt formerly practiced in Harrison, Arkansas.

Physicians Locate

Dr. Dan M. Riner

Dr. H. D. Luck has announced that Dr. Dan M. Riner, a native of Carlisle, is now associated with the Arkadelphia Medical Clinic, Route 1, Box 25, Arkadelphia, in the general practice of medicine.

Dr. Robert Patton

Dr. Robert Patton is now associated with Dr. Willie J. Lee in the Lee Clinic at Stamps in the general practice of medicine.

Dr. Orville A. Hable

Dr. Orville A. Hable began the general practice of medicine associated with Dr. Henry V. Kirby recently in the Boone County Medical Center, 651 North Spring in Harrison.

Medical Society President Speaks

Dr. Ben N. Saltzman of Mountain Home, President of the Arkansas Medical Society, recently was the featured speaker at the Northeast Arkan-

sas Association for the Retarded Children's annual banquet in Jonesboro.

Doctors Retire

Dr. Louis A. Draeger

Dr. Louis A. Draeger of Danville has announced his retirement from the practice of general medicine and surgery after 48 years of service.

Dr. Rogers P. Edmondson

Dr. Rogers P. Edmondson, formerly associated with Dr. C. T. Edmondson at the Edmondson Clinic in Springdale, has announced his retirement from the practice of medicine.

Arkansas Graduates Honored

Dr. Nym L. Barker

Dr. Nym L. Barker, a 1944 graduate of the University of Arkansas School of Medicine, is President-elect of the Texas Medical Association. Dr. Barker will assume office as president in May of 1975.

Dr. Harold E. Hyder

Dr. Harold E. Hyder, a 1954 graduate of the University of Arkansas School of Medicine, has recently been named chief medical officer of the Health Division of Texaco, Inc., with offices in New York.

Dr. John A. Harrel, Jr., Receives Award

Dr. John A. Harrel, Jr., Director, Arkansas Department of Health, recently received the Charles G. Jordan Memorial Award at the opening session of the annual meeting of Southern Branch,

American Public Health Association, in Norfolk, Virginia. Dr. Harrel was honored for his outstanding efforts in effectively implementing new Health Department programs.

State Student Wins AMA Award

Miss Gail Robin Davis of Springdale was one of two high school students receiving awards from

the American Medical Association during the National Science Fair. The students were chosen at the 25th International Science and Engineering Fair in South Bend, Indiana. Miss Davis' project was entitled "Effects of Cigarette Smoke on Ciliary Action in Rabbit Tracheas". She exhibited her work at the AMA convention in Chicago in June.



NEW MEMBERS

Dr. Laura J. Koehn

The Washington County Medical Society has added the name of Dr. Laura J. Koehn to its membership roll. Dr. Koehn is a native of Westville, Oklahoma. She was graduated from Northeastern State College, Tahlequah, Oklahoma, in 1956 and was graduated from the Oklahoma University School of Medicine in 1960. Dr. Koehn completed her internship and a one-year residency at Wesley Hospital in Oklahoma City.

From 1962 through 1972 she was in private and institutional practice in various locations. Since 1972, Dr. Koehn has been in the medical practice of Allergy at the Ear, Nose, Throat, and Allergy Clinic at 2100 Green Acres Road, Fayetteville. She is associated there with Dr. G. Glen Fincher, Dr. Martha Hutson, and Dr. Kenneth Koehn.

Dr. John Darrell Ginger

Dr. John D. Ginger has been accepted for membership in the Washington County Medical Society. He is a native of Tillar, Arkansas.

Dr. Ginger received his B.S. degree in 1962 from the University of Arkansas at Monticello. He was graduated from the University of Arkansas School of Medicine in 1966. While serving in the United States Air Force, he completed his

internship at the United States Air Force Hospital, Kessler Air Force Base, Mississippi. In 1971 he completed a Medicine residency at the University of Arkansas Medical Center and he completed a Dermatology residency there in 1973.

Dr. Ginger is associated with Dr. Spencer D. Albright, III, in the practice of Dermatology at 1925 Green Acres Road in Fayetteville.

Dr. John Dalie Wells

The Sebastian County Medical Society has accepted for membership Dr. John D. Wells. He is a native of Pocahontas, Arkansas.

Dr. Wells received his B.A. degree from Hendrix College in Conway, Arkansas, in 1962. He was graduated from the University of Arkansas School of Medicine in 1966. His internship was completed at Tampa General Hospital in Tampa, Florida. Dr. Wells completed his residency work at the University of Arkansas Medical Center in Little Rock. He is Board Certified by the American Board of Internal Medicine and a member of the Arkansas Society of Clinical Hematologists.

Dr. Wells practices Hematology and Internal Medicine at the Cooper Clinic, Waldron Road at Ellsworth, Fort Smith.

Dr. Frederick Hampton Roy

A new member of the Pulaski County Medical Society is Dr. F. Hampton Roy, a native of Nashville, Tennessee.

He received his B.S. degree in 1958 from the University of Tennessee in Knoxville. Dr. Roy was graduated from the University of Tennessee College of Medicine in Memphis, in 1961. His internship was completed at Roanoke Memorial Hospital, Roanoke, Virginia. Dr. Roy was in private practice in Wilmot, Arkansas, from 1962 until 1963. In 1963, he returned to the University of Tennessee College of Medicine for an Ophthalmology residency which he completed in 1966. He has held a teaching appointment as Associate

Professor of Ophthalmology at the University of Arkansas Medical Center. Dr. Roy is Board Certified by the American Board of Ophthalmology. He is a member of the American Academy of Ophthalmology, the American College of Surgeons, and the American Academy of Pediatrics.

Dr. Roy is in the practice of Ophthalmology at 390 Medical Towers building in Little Rock.

Dr. Aubrey Maxie Worrell, Jr.

The Jefferson County Medical Society has accepted for membership Dr. Aubrey M. Worrell, Jr., a native of Little Rock. He received his B.S. degree in 1958 from Ouachita Baptist College in Arkadelphia, and his M.D. degree in 1962 from the University of Arkansas School of Medicine.

Dr. Worrell completed his internship at Arkansas Baptist Hospital in Little Rock in 1963. He served in the United States Air Force from 1963 to 1973, completing a residency program in Pediatrics in 1967 at Wilford Hall USAF Medical Center, Lackland AFB, San Antonio, Texas. He also completed a residency program at Wilford Hall in Allergy in 1970. Dr. Worrell was the Chief of the Allergy Immunology Section, Department of Medicine, Kessler Medical Center, Kessler AFB, Harrison, Mississippi. He is a member of the American Academy of Pediatrics and the American Academy of Allergy.

Dr. Worrell now has a General Allergy practice at 1600 West 42nd Avenue in Pine Bluff.

Dr. Randall T. Wisdom

Dr. Randall T. Wisdom has been accepted for membership in the Craighead-Poinsett County Medical Society. He is a native of Searcy, Arkansas.

Dr. Wisdom is a 1965 graduate of Arkansas State University in Jonesboro. He was graduated from the University of Arkansas School of Medicine in 1970. His internship was completed at Methodist Hospital in Memphis, Tennessee. He served two and a half years in the United States Army.

Dr. Wisdom is in the General Practice of medicine at 505 East Matthews in Jonesboro, associated with Dr. Durwood Wisdom.

Dr. Jan T. Turley

The Washington County Medical Society has added the name of Dr. Jan T. Turley to its membership roll. He is a native of Muskogee, Oklahoma.

He received his B.S. degree in 1962 from Oklahoma State University in Stillwater. He was graduated from the University of Oklahoma School of Medicine, Oklahoma City, in 1966. Dr. Turley completed his internship at South Texas Medical School in San Antonio, Texas, and his residency at the University of Arkansas Medical Center.

Dr. Turley is associated with Drs. H. B. Brandon and Walter Ely Brooks in the practice of Urology at the Evelyn Hills Shopping Center in Fayetteville.

Dr. Frederick E. Joyce

Dr. Frederick E. Joyce has been accepted for membership in the Washington County Medical Society. He is a native of Shreveport, Louisiana.

Dr. Joyce's pre-medical education was completed at Vanderbilt University, Nashville, Tennessee, where he received a B.A. degree in 1956. He was graduated from the University of Arkansas School of Medicine in 1968. His internship was completed at the University of Colorado Medical Center in Denver, and his residency work in Internal Medicine was completed at the University of Arkansas Medical Center.

Dr. Joyce is in general practice at Block and Dickson Streets in Fayetteville.

Dr. Daniel Charles Dillard

The Pulaski County Medical Society has added the name of Dr. Daniel C. Dillard to its list of members. He is a native of Texarkana, Texas.

Dr. Dillard was graduated from Hendrix College, Conway, Arkansas, with a B.A. degree in 1967. He was graduated from the University of Arkansas School of Medicine in 1971. In 1972, he completed internship work at Hillcrest Medical Center in Tulsa, Oklahoma. He is a member of the Arkansas Chapter, American Academy of Family Practice.

Dr. Dillard is in Family Practice at 3500 South University in Little Rock and associated with Drs. Julian L. Foster and William H. Riley.

Dr. Joe Barrett Colclasure

Dr. Joe B. Colclasure has been accepted for membership in the Pulaski County Medical Society. He is a native of Pine Bluff, Arkansas.

He received his B.S. degree from the University of Arkansas School of Medicine in 1966. He completed his internship at the University of Arkansas Medical Center in 1967. In 1970, he completed a General Surgery residency at the Kennedy Veterans Administration Hospital in Mem-

phis, Tennessee. In 1973, he completed Otolaryngology and Maxillo-facial Surgery residency work at the University of Tennessee Hospital in Memphis. He is Board Certified in Otolaryngology and a member of the American College of Surgeons and the American Head and Facial and Reconstruction Surgeons.

Dr. Colclasure is an Instructor of Otolaryngology and Maxillo-facial Surgery at the University of Arkansas Medical Center, 4301 West Markham, in Little Rock.

Dr. Jonathan D. Collier

The Greene-Clay County Medical Society has

added the name of Dr. Jonathan D. Collier to its membership roll. He is a native of Paragould, Arkansas.

Dr. Collier received his B.S. degree from Ouachita Baptist University in Arkadelphia in 1968 and an M.S. degree from the University of Arkansas in 1969. He was graduated from the University of Arkansas School of Medicine in 1973. His internship was completed at St. Vincent's Infirmary in Little Rock.

Dr. Collier is in Family Practice at 130 South 14th Street in Paragould, associated with Dr. George Collier, Jr.



O B I T U A R Y

Dr. Paul T. Hudgins

Dr. Paul T. Hudgins of Little Rock died April 29, 1974, at the age of 53. He was born January 1, 1921. Dr. Hudgins attended Ouachita College at Arkadelphia, and the University of Arkansas at Fayetteville. He was a 1944 graduate of the University of Arkansas School of Medicine.

Dr. Hudgins practiced medicine in Searcy, Arkansas, for five years and later practiced at St. Vincent Infirmary and Baptist Medical Center in Little Rock. He was a member of the Pulaski County Medical Society, Arkansas Medical Society, and the American Medical Association. He was a veteran of World War II.

Dr. Hudgins is survived by his widow, Genevieve, one son and three daughters.

Dr. Robert Macon Finch

Dr. Robert M. Finch of Paragould died May 18, 1974. He was 40 years old, born December 19, 1933, in Little Rock.

He graduated from Hendrix College, in Conway, Arkansas, in 1960, and was graduated from the University of Arkansas School of Medicine in 1964. Dr. Finch practiced family medicine in

Forrest City and Caraway prior to locating in Paragould in 1967. He was associated with Dr. Jacob M. Williams at the Paragould Clinic.

Dr. Finch was on the medical staff of the Community Methodist Hospital in Paragould, and a member of the Greene-Clay County Medical Society and the Arkansas Medical Society.

He is survived by his widow, Myra Sue, one daughter, his parents, and one sister.



THINGS TO COME



Industrial Hand Injury Seminar

The Washington University School of Medicine Hand Section of Plastic Surgery will present a program on the various facets of industrial injuries of the hand. The program will be held September 14, 1974, at the Barnes Hospital in St. Louis, Missouri. For more information write Paul M. Weeks, M. D., Director, Milliken Hand Rehabilitation Center, 907 Wohl Clinic, 4960 Audubon Avenue, St. Louis, Missouri 63110.

RESOLUTIONS



Dr. Paul T. Hudgins

WHEREAS, the colleagues of Dr. Paul T. Hudgins are saddened by his recent death, and

WHEREAS, Dr. Hudgins was a highly respected member of this Society for sixteen years, and

WHEREAS, he was recognized for his devotion to his chosen field of medicine and to his specialty of anesthesiology;

BE IT THEREFORE RESOLVED:

THAT, this resolution be made a part of the permanent minutes of this Society; and

THAT, a copy of this resolution be forwarded to Dr. Hudgins' family as an expression of sincere sympathy; and

THAT, a copy of this resolution be made available to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials
Committee
T. Duel Brown, M.D., Chairman
Robert Watson, M.D.
Henry Hollenberg, M.D.

Dr. Charles E. Garratt

BE IT RESOLVED that the Garland County Hot Springs Medical Society pay special tribute to our recently departed member, Dr. Charles Edward Garratt.

Dr. Garratt practiced medicine over a period of some 55 years. He was well known in the field of Gastroenterology and was a Diagnostician of note. He was very successful as a banker and businessman. He traveled extensively over many parts of the world. His companions, when hunting and fishing, attest to his superior abilities along this line.

He was a kind, considerate man, and we wish to express our deep sorrow to his wife, Lucile, relatives, and his many friends.

BE IT FURTHER RESOLVED, that a copy of this Resolution be sent to his wife, to the State Medical Journal, to the local press, and be spread on the minutes of the Society.

Louis R. McFarland, M.D., President
Thomas P. Thompson, Jr., M.D., Secretary
Gaston A. Hebert, M.D., Chairman,
Resolutions Committee



August, 1974

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orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

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According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

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two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

For further information on this subject, the following references are provided:

1. Henry BW, *et al*: *Dis Nerv Syst* 30:675-679, Oct 1969.
2. Hollister LE, *et al*: *Arch Gen Psychiatry* 24:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970.

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or over-sedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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Some Newer Developments in Gynecologic Cancer**

Laman A. Gray, M.D.*

SECTION I. CARCINOMA OF THE VULVA

In recent years, the treatment of carcinoma of the vulva has emphasized increasingly radical operative procedures. Especially, Collins, Collins, Barclay, and Nelson² of New Orleans and Way¹⁵ of New Castle-on-Tyne in England have advised the removal of large portions of skin extending up into each groin, with radical inguinal, femoral, and even iliac lymph node dissection. Sometimes these dissections have included the obturator nodes. Even further operative procedures were suggested by Brunschwig and Brockmeyer¹ to include radical hysterectomy and removal of the bladder and lower rectum and ureters, simultaneously with radical vulvectomy. These extended operations have been performed even on debilitated and elderly patients, with surprising ability to survive. Radiation therapy in the majority opinion has been thought to have no place in the treatment of this disease.

At the recent meeting of the American College of Surgeons in Chicago, Shingleton, Fowler, Palumbo, and Koch,¹⁴ of the University of Alabama Medical School, reported a retrospective study of 121 patients treated during twenty years for carcinoma of the vulva. They concluded that surgery for patients with lesions confined to the vulva should not necessarily be so radical. They believed that pelvic lymphadenectomy is indicated only if metastases are present in inguinal nodes, or if unusual size and location of the lesion suggest the possibility of pelvic node involvement. They found the majority of the patients with cancer of the vulva did not have any positive lymph nodes and that most lesions were confined to the vulva.

Shingleton, et al., proposed that patients with carcinoma of the vulva should receive radical vulvectomy and bilateral inguinal lymph node dissection but that pelvic lymphadenectomy should be performed only if, during groin dissection, nodes are proven positive by frozen section. Similarly, the staff at the M. D. Anderson Hospital, Houston, Texas, recommends that even inguinal lymph node dissection may safely be omitted in selective cases when the lesion appears to be confined to the vulva, is less than 2 cm. in diameter, biopsy of an inguinal node is negative, and especially when patients are too infirm to suffer the risks attending lymphadenectomy. This latter was a report by Rutledge, Smith, and Franklin.¹³

On the other hand, at the Massachusetts General Hospital, Green, Ulfelder, and Meigs⁴ reported that the radical internal lymph node dissection is performed routinely because they felt the extended operation did not add to the morbidity or mortality of the patients, and in their series 55% to 65% of the patients had inguinal node involvement.

Summary

These recent reports indicate a developing difference of opinion in the radicality of surgery for malignant diseases. This is somewhat similar to the present situation in regard to breast cancer. One may believe that a less radical approach to certain forms of cancer may be considered in individual instances, yet one must be very careful to give the patient the very best treatment in his particular case. This indicates the necessity for the best judgment, and the employment of the philosophy in the "Guidelines for Cancer Care,"¹⁵ namely, the team approach to the treatment of cancer, with full utilization of consultations and careful consideration of every aspect of the individual.

*Department of Obstetrics and Gynecology, University of Kentucky School of Medicine, Louisville, Kentucky 40202.

**Presented at the 97th Annual Meeting of the Arkansas Medical Society, April 1-4, 1973, Hot Springs, Arkansas.

SECTION II.

IN SITU AND EARLY INVASIVE CARCINOMA OF THE VAGINA

Probably the greatest advance in the treatment of any single form of malignant disease was the discovery by Papanicolaou and Traut¹¹ that pre-malignant and invasive cancers of the cervix uteri shed surface cells which indicate the type of disease present. If this screening method is used on every woman, it is evident that essentially every carcinoma of the cervix can be discovered very early and be eradicated from the population. Appropriate repeat screenings, routine pelvic examinations, and proper treatment are obviously necessary. Once discovered, the treatment of carcinoma in situ of the cervix, sometimes by cold knife conization, recently by the freezing techniques (which seem to us to offer no more than its opposite, the actual cautery,) and more often by total hysterectomy, has led to a sense of security that the patient is permanently cured of her lethal disease.

However, it is becoming increasingly clear that a "field response" to a malignant stimulus in the lower genital tract affects not only the cervix, which may form carcinoma in situ and invasive cancer, but simultaneously or subsequently may cause similar lesions to be formed in the vagina and even on the vulva.^{9, 10} Because the potentiality of this "field response" is present in all women who may have had any one of these three malignant lesions, although the cervix is far more frequently involved, the subsequent follow-up of these patients must include careful study of the other two organ areas. In the case of carcinoma in situ or invasive carcinoma of the cervix, the vagina subsequently must be carefully followed by inspection and cytologic studies at regular intervals. Although vulvar lesions occur much more rarely, the vulva should be examined regularly; the application of toluidine blue in 1% aqueous solution to distinguish suspicious areas has been advised by Collins, et al.

Recently, Gray and Christopherson³ reported the findings in fifteen patients with asymptomatic early neoplastic lesions of the vagina. Two of these had had total hysterectomy for benign lesions and subsequently developed carcinoma in situ thirteen and fourteen years later. Two patients with cervical carcinoma in situ had

simultaneous spreading of the lesion to the vagina. Four patients, apparently cured of cervical carcinoma in situ, developed similar lesions in the vagina after hysterectomy. Three patients with previous carcinoma in situ of the cervix developed early invasive cancer of the vagina at a later date. Two patients, with microinvasive carcinoma of the cervix after total hysterectomy, later developed carcinoma in situ of the vagina in one case and microinvasive carcinoma in the other. One patient with invasive carcinoma of the cervix had simultaneous in situ carcinoma of the vagina. Finally, one patient with early invasive carcinoma of the cervix, apparently completely cured by surgical excision, developed carcinoma in situ of the vagina and finally invasive carcinoma of the vagina six years later.

It is of particular interest that visual examination of the vagina may reveal the lesion. The in situ carcinoma appears as a "blush" in most instances, although occasionally it presents as a slightly granular, raised lesion, similar to that of eversion of the cervix. In one instance in our experience, the lesion appeared as a leukoplakia of the vaginal wall. In each instance, the new vaginal lesions were uncovered by routine Papanicolaou cytologic studies. The application of iodine to the vagina reveals nonstaining of the involved epithelium, whether it represents dysplasia, carcinoma in situ, or early invasive carcinoma. In the postmenopausal atrophic vagina, iodine commonly does not stain the vagina, but after estrogens are applied locally for two or three weeks, or are given systemically, the uninvolved epithelium stains well with iodine.

Subsequent and usually new superficial pre-invasive lesions respond well to local excision of the involved vagina. It has been reported by Rutledge¹² that irradiation therapy gives satisfactory results in the treatment of this lesion.

Summary

Following treatment of carcinoma in situ or invasive carcinoma of the cervix, a recurrent or new appearance of the same disease may appear on the vagina or vulva. All patients with these original lesions of the cervix should have regular examinations and cytologic studies. Fifteen vaginal lesions have been studied by us in a recent period of time, which indicates that subsequent carcinoma in situ of the vagina is not uncommon.

Satisfactory treatment of carcinoma in situ

of the vagina results from local excision. With extensive lesions, total vaginectomy may be indicated, especially for noninvasive growth. Construction of an artificial vagina may be considered in that circumstance.

The iodine staining test is helpful to demonstrate the extent of dysplastic epithelium and carcinoma in situ in the vagina. The postmenopausal patient with atrophic vaginal epithelium should have estrogenic preparation before excision in order to better delineate the lesion.

When early lesions occur on the vulva, they may be made more discernible if 1% aqueous solution of toluidine blue is applied to the vulva.

SECTION III.

PROGESTINS FOR ENDOMETRIAL CARCINOMA

Of great interest is the effect of progestins on carcinoma of the endometrium, both as an adjunctive treatment and as a palliative treatment for recurrent disease.

In recent years Kistner⁷ reported the experimental study and effects of various forms of progesterone and synthetic progestins on atypical endometrial hyperplasia and carcinoma in situ of the endometrium. These lesions have been poorly defined to the present time. They generally include adenomatous changes in endometrial hyperplasia and those islands of eosinophilic staining, benign appearing, endometrial glands which are rather closely crowded in a small area of the endometrium. These changes tend not to be localized and are found only by examination of the endometrium. A relationship to subsequent endometrial carcinoma has not been proven conclusively. However, a number of these cases have been treated with progestins, and it has been thought that these lesions have disappeared.

Of greater interest is the effect of progestins on well-formed and metastatic carcinoma of the endometrium. Approximately one-third of the cases of carcinoma of the endometrium are considered sensitive to progesterone. These cancers many diminish in size after that hormone, orally or parenterally. A double blind study instituted by Lewis, Nadler, Bross, and Slack⁸ of Hahnemann Medical School, San Francisco, with co-operation throughout the United States, has indicated no improvement in the simultaneous use

of progestins and the usual irradiation and surgical therapy for this lesion.

On the other hand, it is clear from the original work of Kelly and Baker⁶ that progestins may cause temporary regression of endometrial carcinoma in one-third of the cases.

Recently, Wentz¹⁶ of Cleveland has reported on the treatment of sixty patients with recurrent adenocarcinoma of the endometrium treated for two to sixty months with dimethisterone, 100 mg. daily, and megesterol, 40 mg. daily, with an objective response in 68.3%. This consisted of cessation bleeding, decrease in size of the tumor, and absence of cancer by biopsy; however, only 30% of the total survived two years or longer after treatment so that that objective response was short-lived in over half of those cases. In some dozen cases with recurrent adenocarcinoma of the endometrium treated by us, we have had only one good result. That patient had extensive cancer throughout the pelvis with multiple metastases in the lungs. After receiving norglutate, 20 mg. daily, the lung and pelvic lesions essentially disappeared over a period of four years. Then there was recurrence, total lack of response to larger doses of progesterone, and death.

Summary

The possibility of the use of progestins in varying forms and in large doses, although a particular dose seemed unrelated to the results, is to be kept in mind in the treatment of recurrent and metastatic carcinoma of the endometrium. Possibly one-third of the patients may be aided over a period of one to seven years. This offers one of the few good results from chemotherapy (hormone therapy in this instance) and offers hope for a broader field of application in this area.

CONCLUSIONS

1. Extended and radical surgical operations may be abated in some areas of cancer therapy. Recently, this has been applied to carcinoma of the vulva.
2. The "field response" to the development of carcinoma of the cervix, vagina, and vulva emphasizes the necessity of simultaneous observation in each of these organ areas when one is involved in carcinoma.
3. Progesterone may be of value in a small

proportion of patients with recurrent or metastatic endometrial carcinoma.

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Problem Oriented Medical Records

In Ambulatory Patient Care**

Reuben B. Widmer, M.D.*

Dr. Weed, the father of the POMR, was primarily concerned about the hospital record and how it would improve patient care, help self-audit, and be a source of postgraduate education to the attending physician.

Cross and Bjorn adapted it to a restricted type of office practice with emphasis on general internal medicine.

In the Department of Family Practice at the University of Iowa College of Medicine, we are working at adapting it further to a general family practice.

THE PROBLEM

To determine whether POMR has any value for the practicing physician, we will look at the reasons for keeping useful records and some of the problems that thwart our efforts.

Keeping useful records improves patient care by providing, first, for retrieval of information in the future, and secondly, to inform our partners, consultants, and third party payers, who need and want information, of the patient's management.

A third reason of increasing importance is recertification and relicensure. The ABFP has already decided that in 1976, when the first diplomats come up for recertification, 25% of the score will be based on patient record examination. Other specialty boards are studying the same possibility.

The first two things that make for useless records are illegibility and disorganization. The third is a word and information glut, which is almost as important as the first two. The lack of time in a busy office practice is probably the number one excuse for incomplete records.

With increasingly good reasons for keeping useful records, and in the light of our problems

in keeping good records, the ideal record should be:

1. A legible record that can be read by ourselves as well as our colleagues.
2. A record structured in such a way that retrieval of information is efficient and easy.
3. A record that records the facts concerning a patient's health care, which by its structure and organization, allows us to preserve *those items necessary for their long term management*. It should also allow us to relegate to other files those facts that are necessary only for the short term care of acute episodes.
4. A record that will serve the needs of the physician and his staff in their care of the patient, thereby improving patient care rather than merely satisfying Medicare or the hospital record committee.

POMR AND THE PROBLEM

We will now show how POMR can be useful in achieving the goals of useful record keeping. First, just because we call it POMR doesn't make it the perfect record. It can have many pitfalls. It does not meet every doctor's needs, but POMR principle is adaptable and it can be adapted to the particular needs of most physicians or groups of physicians. There is no one way of keeping POMR.

1. The time element for the busy practitioner is not alleviated by using POMR. In fact, it may take longer to record than conventional methods but it does save time for retrieval of information. The physician's time can be shortened by delegating much of the data recording to an aide and dictating parts of the progress notes.
2. POMR does not help legibility. To make a more readable record, the physician must dictate progress notes or take a course in penmanship. We are wasting a lot of valuable

*Assistant Professor, Department of Family Practice, University of Iowa College of Medicine, Iowa City, Iowa

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time if neither we nor our colleagues can read our notes.

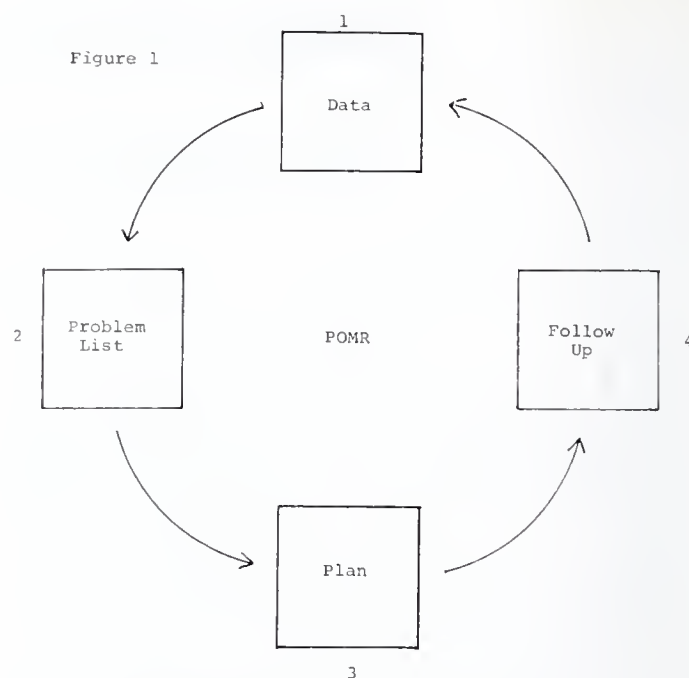
3. The organization of the POMR permits easier retrieval of information for us, our partners and consultants. This ease of retrieval will also lend itself to research in ambulatory patient care as carried out by private practitioners. In Iowa, the figure given is one-tenth of one percent of all people seeking medical care reach a teaching medical center. The bulk of medical literature is written about that small minority. The specialty certification boards, peer review committees and Medicare will find the POMR more efficient for recertification and peer review. The physician will be able to demonstrate his patient management skills in a more organized fashion.
4. Most physicians feel that every word they speak or write is inspired and thus it must be preserved forever. The structured POMR makes it an excellent instrument, *if properly used*, to correct the problem of word and information pollution inherent in most records. One method used in our office will be described later. The term "garbage in" "garbage out" (GIGO) applies to medical records as well as to computers.
5. The initials POMR can also stand for Patient Oriented Medical Records. Properly used, this record should be a servant to its creator for better patient care, rather than enslaving him to verbage and lack of structure for the sake of rules and regulations.

THEORY OF POMR AND USE IN MODEL OFFICE

Figure 1 demonstrates the component parts of the POMR as squares in a circle showing their logical dependence upon each other.

The first square depicts the data base. This includes all of the traditional information we have always gathered from the patient. The occasion and the need will determine how complete the history, physical, laboratory and x-ray data are.

From this information about the patient we define the problem list (Square 2, Figure 1) which includes only those items that are important to the future health care of the patient. The acute episodes which include self-limiting



or easily curable illness and acute injuries with no long-term effects are not included here.

Each problem is numbered and dated as to its onset and when it was recorded. Problem 1 on every patient's chart is "Health Maintenance." This covers physical exam, cancer checks, well-baby checks, and immunizations. Problem 2 on every problem list is "Acute Episodes." Under this heading come the self-limiting and easily treated acute illnesses and injuries with no long-term effects. The rest of the problem list includes important positive findings from the data base, previous diagnoses, sociodemographic information, psychological problems and positive family history important to this patient's future health care.

When the problem list is finished, we record the initial plan (Square 3, Figure 1) for each problem that needs one. The initial plan should also include the available data for this particular problem structured as follows:

(S) Subjective.

This includes all family history and past medical history pertinent for this problem.

(O) Objective.

All known objective information such as physical exam, lab, x-ray, etc.

(A) Assessment.

Working diagnosis and differential diagnosis.

(P) Plan.

Patient management such as further tests, education, and the treatment.

The fourth square (Figure 1) shows the follow-up visit which is recorded as a structured progress

note for the problem dealt with using "Subjective", "Objective", "Assessment", and "Plan" (SOAP) as headings like in the initial plan. Do not record the information already recorded in the initial plan.

The *Subjective* portion records the symptoms of that particular problem since the last visit and the patient's compliance with treatment. Also included would be any new history that has been revealed.

The *Objective* portion records the physical, laboratory and x-ray findings obtained at this visit.

The physician's analytic *Assessment* of the subjective and objective findings may add new problems or make a more definitive diagnosis.

The *Plan* records the management of the patient including further tests and examinations to resolve the differential diagnosis as well as treatment deemed necessary.

We will now go through the process of a complete workup of a patient who might present himself at the Family Practice Office at the University of Iowa, and how we record the results in POMR fashion.

On January 14, 1974, John Doe, age 55, calls at the office for an appointment with the statement to the receptionist that he "just hasn't been feeling well, and wants a complete checkup." It is explained to him what a complete workup consists of in our office and he is given an appointment. He is given or mailed a ROCOM history questionnaire to fill in at home and asked to present himself at 8:00 a.m. on the morning of his appointment without breakfast.

When he arrives for his appointment, he is asked to complete the Demographic Form (Figure 2). Then the blood is drawn for a SMA18, the urine is collected, the EKG, chest x-ray and pulmonary function studies are done. At 10:00 a.m., the patient and physician go over the history questionnaire. Positive answers in the history and family history are explored in greater detail and results recorded. After the physical exam, he is given an appointment to return in five to seven days.

When the lab, x-ray, EKG, and spirometry results are back, the physician sits down to analyze the results. We encourage the residents to underline all positive findings. He then reviews the results of the physical exam which have been

recorded on a check-off list. Because of space limitations, any positive findings here are simply marked as such and are described in detail later in the initial plan. The significant findings are again underlined for easier retrieval.

The laboratory results had been recorded on the lab sheet along with the EKG and chest x-ray results by an aide. Abnormal findings are duly noted and underlined for easy reference by the physician.

Now let us look for the positive findings on each sheet that records the data base for this patient.

In Figure 3, we see this man gave a family history of diabetes. Figure 4 shows the questionnaire answer sheet with the doctor's notes. Here we see that he checked signs of depression. These historical points were investigated further by the examining physician. Further signs and symptoms of depression were revealed and noted on this answer sheet.

The two sides of the physiological data sheet shown in Figures 5 and 6 show there were no abnormalities found except for A-V nicking on funduscopic examination.

The laboratory results, Figures 7 and 8, show fasting blood sugar of 180 mg% and 1+ glycosuria. The EKG, chest x-rays, and pulmonary function tests were normal.

A summary of the positive findings include family history of diabetes, story of probable depression, vessel changes in the fundi, elevated fasting blood sugar and glycosuria. In the light of the history we have taken and the objective findings, we have enough evidence to come up with the problem list:

Problem 1 — Health Maintenance.

Problem 2 — Acute Episodes.

Problem 3 — Family History of Diabetes.

Problem 4 — Elevated Blood Sugar.

Problem 5 — Reactive Depression.

Problems 1 and 2 are automatically put on every patient's problem list.

We now have the first two squares in the circle of POMR completed — the data base has been collected, and the problems have been listed. Now the initial plan for each problem needs to be written as noted in Square 3.

The initial plan is SOAPed rather than just the plan being given for the patient's management. "S" includes all of the historical data that

is apropos to this particular problem, "O" includes all of the objective findings, "A" includes the physician's assessment, and "P" records the plan of action. By doing this, all original information we have about this specific problem is

in one place. This information needs to be recorded only once and should not be repeated again later in the Progress Notes.

Problem #3 — History of Diabetes.
S. Mother and two maternal uncles had dia-

Figure 2

OAKDALE FAMILY PRACTICE OFFICE
Oakdale, Iowa 52319

FAMILY MEMBERS' NAMES: Last, first, middle		Sex	Birth Date (mo/day/yr)	Social Sec- urity No.	Educational Level
HUSBAND: John Doe		M	6/29/18		
WIFE: Mary		F	9/28/20		
Children living at home:	1. Betty	F	6/5/54		
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
OTHER MEMBERS OF THE HOUSEHOLD:					
1.					
2.					
MAILING ADDRESS: (Street, city, zip) Small Town, Iowa				TOWNSHIP	Home telephone: 353-6784
OCCUPATION		EMPLOYER		ADDRESS	
Husband: Store Manager		Business phone: 353-6780			
Wife: Housewife					
EMERGENCY NOTIFICATION (outside immediate household) & Address Bill Doe (brother)					Telephone: 353-6270
INSURANCE INFORMATION					
Company:		Policy Number:			
In the name of: Blue Cross and Shield					
Company:		Policy Number:			
In the name of:					
Previous places of residence:					
Referred to this office by:					

Figure 3

IDENTIFICATION DATA Fill in the following information. PLEASE PRINT

Name JOHN DOE Date 1-15-74 #
Address SMALL TOWN, IOWA Date of birth 6-29-18 ☒ Male ☐ Female
☒ Married ☐ Separated ☐ Divorced ☐ Widowed ☐ Single
Home telephone Education: years Elementary years High School
Business telephone 4 years College, Technical, Business, etc.
Occupation Businessman

FAMILY HISTORY Please follow the instructions given for each heading outlined below

FAMILY	YEAR OF BIRTH	HEALTH STATUS		ILLNESSES														DEATHS			
		Good	Poor	Allergies or Asthma	Anemia	Bleeding Tendencies	Cancer or Tumor	Diabetes	Epilepsy	Glaucoma	Gout	Heart Trouble	High Blood Pressure	Kidney or Bladder Trouble	Nervous Breakdown	Rheumatism or Arthritis	Stomach or Duodenal Ulcer	Stroke	Tuberculosis	Cause of Death	Age
Father:	1895	<input checked="" type="checkbox"/>																			
Mother:	1896		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>														
Brothers or Sisters:	1916	<input checked="" type="checkbox"/>																			
	1922	<input checked="" type="checkbox"/>																			
	1924		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>														
Spouse:	1919	<input checked="" type="checkbox"/>																			
Children:	1945	<input checked="" type="checkbox"/>																			
	1948	<input checked="" type="checkbox"/>																			
UNCLE	1894						<input checked="" type="checkbox"/>														
UNCLE	1898		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			MI	50	

Grandparents (Mark an (X) for illnesses only)

YOUR ILLNESSES Start here →

Give your age at onset for any of the following illnesses you have now or have had

Age <u> </u> eczema	Age <u> </u> eye disease	Age <u> </u> neuralgia or neuritis	Age <u>8</u> measles	Age <u> </u> rheumatic fever
<u> </u> hives or rashes	<u> </u> hemorrhoids	<u> </u> pancreatitis	<u> </u> mononucleosis	<u> </u> venereal disease
<u> </u> bronchitis	<u> </u> hernia	<u> </u> thyroid disease	<u>2</u> mumps	<u> </u> yellow jaundice
<u> </u> diverticulosis	<u> </u> liver disease	<u>3</u> chicken pox	<u> </u> nervous exhaustion	<u> </u> other <u> </u>
<u> </u> emphysema	<u> </u> malaria	<u>6</u> German measles	<u> </u> polio	<u> </u>

Have you ever been turned down for life insurance, military service or employment because of health problems? ☐ Yes ☒ NoHave you been hospitalized more than three times? ☐ Yes ☒ No

Give the following information for the last three times you have been hospitalized starting with the most recent. (Women: Do not list normal pregnancies.)

	HOSPITALIZATION (1)	HOSPITALIZATION (2)	HOSPITALIZATION (3)
Type of operation or illness:			
Month and year hospitalized:			
Name of hospital:			
City and State:			

Place an (X) next to any of the following tests or immunizations you have had and if you can, give the year you last had them.

(X) (Year) TESTS	(X) (Year) IMMUNIZATIONS
<u> </u> chest x-ray	<input checked="" type="checkbox"/> 1970 smallpox
<u> </u> kidney x-ray	<input checked="" type="checkbox"/> 1970 tetanus
<u> </u> G.I. series	<input checked="" type="checkbox"/> 1970 polio
<u> </u> colon x-ray	<u> </u> typhoid
<u> </u> gallbladder x-ray	<u> </u> flu
<u> </u> electrocardiogram	<u> </u> mumps
<u> </u> T.B. test	<u> </u> measles
<u> </u> other x-rays	<u> </u> other

Place an (X) in the appropriate column for any medicines you use or are allergic to.

(Use) (Allergic to) MEDICINES
<input checked="" type="checkbox"/> aspirin
<u> </u> penicillin
<u> </u> sulfa
<u> </u> codeine
<u> </u> Demerol
<u> </u> antibiotics
<u> </u> laxatives or sedatives
<u> </u> other

Figure 4

Name. JOHN DOE Date 1-15-74 Patient no. _____

Doctor's notes MOOD -- Also admitted problems with those underlined, plus
fatigue, no ambition, and he is self-deprecatory

1. HEAD and NECK

- ☐ frequent headaches
☐ neck pains
☐ neck lumps or swelling

2. EYES

- ☒ wears glasses since age 15
☐ blurry vision
☐ eyesight worsening
☐ sees double
☐ sees halos
☐ eye pains or itching
☐ watering eyes
☐ eye trouble

3. EARS

- ☐ hearing difficulties
☐ earaches
☐ running ears
☐ buzzing in ears
☐ motion sickness

4. MOUTH

- ☐ dental problems
☐ swellings on gums or jaws
☐ sore tongue
☐ taste changes

5. NOSE and THROAT

- ☐ congested nose
☐ running nose
☐ sneezing spells
☐ headcolds
☐ nose bleeds
☐ sore throat
☐ enlarged tonsils
☐ hoarse voice

6. RESPIRATORY

- ☐ wheezes or gasps
☐ coughing spells
☐ coughs up phlegm
☐ coughed up blood
☐ chest colds
☐ excessive sweating

7. CARDIOVASCULAR

- ☐ high blood pressure
☐ racing heart
☐ chest pains
☒ dizzy spells when in high school,
☐ shortness of breath none since
☐ swollen feet or ankles
☐ leg cramps
☐ hot flashes
☐ heart murmur

8. DIGESTIVE

- heartburn ☒ after chili,
bloated stomach ☐ other hot
belching ☐ foods
stomach pains ☐
nausea ☐
vomited blood ☐
difficulty swallowing ☐
constipation ☒ had trouble
loose bowels ☐ in college,
black stools ☐ no trouble
grey stools ☐ now
pain in rectum ☐
rectal bleeding ☐

9. URINARY

- night frequency ☐
day frequency ☐
wets pants or bed ☐
burning on urination ☐
brown, black or bloody urine ☐
difficulty starting urine ☐
urgency ☐

10. MALE GENITAL

- weak urine stream ☐
prostate trouble ☐
burning or discharge ☐
lumps on testicles ☐
painful testicles ☐

11. FEMALE GENITAL

- menstrual trouble ☐
breakthrough bleeding ☐
heavy bleeding ☐
premenstrual tension ☐
birth control pill ☐
lumps in breasts ☐
vaginal discharge ☐

PAP smear

last period

12. PREGNANCIES

- gravida ☐
miscarriages ☐
stillbirths ☐
premature births ☐
para ☐
cesareans ☐
abortion ☐

13. MUSCULOSKELETAL

- ☐ aching muscles or joints
☐ swollen joints
☐ back or shoulder pains
☐ painful feet
☐ handicapped

14. SKIN

- ☐ skin problems
☐ itching or burning skin
☐ bleeds easily
☐ bruises easily

15. NEUROLOGICAL

- ☐ faintness
☐ numbness
☐ convulsions
☐ change in handwriting
☐ trembles

16. MOOD

- ☐ nervous with strangers
☐ difficulty making decisions
☐ lack of concentration or memory
☒ lonely or depressed
☐ cries often
☒ hopeless outlook
☐ difficulty relaxing
☐ worries a lot
☐ frightening dreams or thoughts
☐ shy or sensitive
☐ dislikes criticism
☐ loses temper
☐ annoyed by little things
☐ work or family problems
☐ sexual difficulties
☒ considered suicide
☐ desired psychiatric help

17. GENERAL

- ☐ weight changes
☐ tends to be hot or cold
☐ loss of interest in eating
☐ always hungry
☐ armpits or groin swelling
☐ fatigue
☐ sleeping difficulties
☐ lack of exercise
☐ smokes
☐ drinks alcohol daily
☐ heavy coffee or tea drinker
☐ marijuana
☐ heroin, LSD, similar drugs
☐ bites nails

Special problems or symptoms: I haven't felt well for over a year

betes; also, one 50-year-old brother with severe brittle diabetes since age 6. One uncle died of MI at age 50. Mother alive and well controlled. Other uncle had stroke and is an invalid.

O. None.

A. Strong family history of diabetes on maternal side. Elevated fasting blood sugar now becomes more significant.

FAMILY PRACTICE OFFICE
UNIVERSITY OF IOWA
PHYSICAL DATA SHEET

Figure 5

NAME: JOHN DOE Date 1-15-74

		R	L	R	L	R	L	R	L
Body Frame S M L	Height/Age	5'10" / 55							
	Weight/Pred. W.	155 / 150							
Nose	Airway	OK	OK						
	Sept./Turb.	OK	OK						
	Sinuses	OK							
Mouth	Lips/Tongue	OK	OK						
	Bucc.	OK							
	Gums/Teeth	OK	OK						
	Throat/Larynx	OK	OK						
Ears	Pinnae/Canals	OK	OK						
	TM's	OK	OK						
	Audiometry 500								
	1000								
	2000								
Eyes Glasses Yes No Color N A	Vision Far	20/20	20/20	20/20					
	Near								
	ESO EXO	O	O						
	R.H. L.H.	O	O						
	Fields	OK	OK						
	E.O.M.(cover)	O	O						
	Lids/Pupils	OK	OK						
	Conj/Corn/Schl	OK	OK	OK					
	Fundi	AV	Nicking						
	Tonometry	18	17						
Neck	Carotids(Bruit)	O	O						
	Venous Dist.	O	O						
	Thyroid	OK							
	Trachea	Midline							
	Mass	O	O						
Breasts	Nipple & Areola	OK	OK						
	Masses	O	O						
	Symmetry	OK	OK						
Chest & Lungs	Inspection	NEG	NEG						
	Palpation	NEG	NEG						
	Percussion	NEG	NEG						
	Auscultation	NEG	NEG						
	FVC/% Pred.								
	1.0 FEV/% FVC								
	TB Skin Test	NEG							
Cardiovascular	BP (Sitting)	130/85	130/80						
	BP (Supine)	130/80	125/80						
	BP (Leg)	120/75	120/75						
	Pulse/Irreg.	76	REG						
	Rhythm	SINUS							
	Murmurs	2+	2+						
	Pulses Radial	2+	2+						
	Femoral	2+	2+						
	Popliteal	2+	2+						
	Post-tibial	2+	2+						
Dorsalis Pedis	2+	2+							

- P. Investigate Problem # 4.
 Problem #4 - Elevated Blood Sugar.
 3. History of moderate polydipsia and polyuria with 2X nocturia. General fatigue and weight loss.

- O. Height 6', weight 155 lb. See data sheet for negative physical findings. Blood sugar 180 mg% UA 1+ sugar A-V nicking both fundi.
 A. Probably diabetes mellitus adult onset.
 P. Do glucose tolerance in a.m. Discuss pos-

Figure 6

NAME: JOHN DOE

Date 1-15-74

		R	L	R	L	R	L	R	L
Abdomen/GI	Shape	FLAT							
	Masses	O							
	Tenderness	O							
	Organomegaly	O							
	Hernia	O	O						
	Rectal	NEG							
	Guaiac	NEG							
	Sigmoidoscopy	20cm OK							
Pelvic/Rectal	Genitalia	NORMAL O							
	Introitus/Vagina	/		/	/	/	/	/	/
	Pap/Prostate	/		/	/	/	/	/	/
	Cervix/Uterus	/		/	/	/	/	/	/
	Adnexa	/		/	/	/	/	/	/
Skin	Texture/Color	OK	OK	/	/	/	/	/	/
	Nodules/Eruptions	O	O	/	/	/	/	/	/
	Lesion/Rash	O	O	/	/	/	/	/	/
	Scars/Hair	O	OK	/	/	/	/	/	/
Lymph Nodes	Cervical	O	O						
	Axillary	O	O						
	Inguinal	O	O						
	Other								
Spine/Extremities	Deformity	O	O						
	Joints	NEG	NEG						
	Varices	O	O						
	Edema	O	O						
	Blanching/Cyanosis	O	O	/	/	/	/	/	/
Neurological Handedness R L	Gait/Cerebellar	OK	O	/	/	/	/	/	/
	Speech/Tremor	OK	NO	/	/	/	/	/	/
	Babinski/Human	NEG	NEG	/	/	/	/	/	/
	Cranial Nerves	INTACT							
	Motor	OK	OK						
	Sensory	OK	OK						
	DTR's BPS	1+	1+						
	TPS	1+	1+						
	AJ	2+	2+						
	KJ	2+	2+						
	Vib (Toe)	OK	OK						
	Position (Toe)	OK	OK						
	Personality	Anxious/Depressed	MILD	+	/	/	/	/	/
Cooperative/Preoc.		OK	O	/	/	/	/	/	/
Suspicious/Irrit.		O	O	/	/	/	/	/	/
MMPI									
Other									
SIGNATURE									

sibility of diabetes with patient. Make arrangements for patient to visit with nutritionist tomorrow a.m.
Problem #5 — Reactive Depression.

S. Very tired, difficulty in sleeping day or night. Lost his ambition for work and play. Self-depreciatory remarks. Ideations of suicide but no suicidal acts. Appetite poor; weight

FAMILY PRACTICE OFFICE
UNIVERSITY OF IOWA

Figure 7

NAME: JOHN DOE

URINALYSIS

Date	1/15/74												
Color/Char.	OK												
SG	1015												
pH (Reac)	7.0												
Protein	NEG												
Sugar	1+												
Ketones	NEG												
Blood	NEG												
Bilirubin	NEG												
Microscopic	NEG												

HEMATOLOGY

Date													
WBC (10 ³)	8.1												
Bands	3												
Segs	72												
Lymphs	25												
Eos	0												
Baso	0												
Mono	1												
Platelets	250												
RBC (Morph)	OK												
Hgb	14												
Hct	42												

MICROBIOLOGY

Date	Source of Spec. & Result	Date	Source of Spec. & Result

loss. Denies having had euphoric episodes in past. Speaks sadly about coming retirement. Fears he has serious illness that will make him an invalid like his uncle. Has had increasing depression during past year. At the

present time he feels very badly and hopeless. Denies previous episodes.

O. Patient appears sad and depressed, never smiled, cried easily during interview. Weight 155 lb. Body attitude is one of dejection.

Figure 8

BIOCHEMISTRY

HISTOLOGY & CYTOLOGY

[illegible]

Chest Film

X-RAY AND EKG

[illegible]

A. Reactive Depression — Unipolar. Could be suicidal.

P. Start on Tofranil 25 mg a.m. and noon, 50 mg hs. Discuss problem with patient and family for close supervision. See in one week. Advise that prescription takes two to three weeks for full effect. Give enough time at each appointment for patient to ventilate.

Progress Notes

January 22, 1974.

Problem #4 — Elevated Fasting Blood Sugar.

S. No change in symptoms.

O. Glucose tolerance test shows diabetic curve — see lab data sheet.

A. Change Problem 4 to Diabetes Mellitus.

P. See nutritionist today concerning diet. Lente insulin 20 units 7 a.m. His wife is R.N. and could help teach patient to give insulin or ask VNA to make home visits. Do urine sugar test qid ac & hs.

January 28, 1974.

Problem #4 — Diabetes Mellitus.

S. No polyuria or polydipsia now. No nocturia. Poor appetite still but weight holding steady. Had no insulin shocks.

O. UA — neg for sugar past 4 days — 2 hours post prandial sugar today 150, weight 155.

A. Diabetes coming under control.

P. Continue Rx unchanged. Follow up 1 week.

Problem #5 — Depression.

S. Still tired and no ambition but feels some better: sleeps all night now, poor appetite still. Does not complain of medication side effects.

O. Looks brighter, didn't cry during interview. weight 155 lb.

A. Some improvement of the symptoms of depression.

P. Increase Tofranil to 25 mg ac and 50 mg hs. Follow up 1 week.

The above problem lists and the corresponding progress notes take care of the problems that are important for this patient's future health care. There are acute episodes which may have an effect on the chronic problems but are only important on a week-to-week or month-to-month basis for his future care. For example, if he presents with an acute episode such as URI a month after you start him on his diabetes treatment, you would list it as Problem 2 "Acute Epi-

sodes" with date and diagnosis only, as follows:

February 22, 1974.

Problem #2 — Acute Episode U.R.I.

With this short note on the Progress Note, you keep a permanent chronological record of the patient's visits but you describe the management on the acute episode sheet, which is separate from the progress note on long term problems. You will note that we enumerate the acute episodes with the alphabet:

Episode "A" — U.R.I.

S. Rhinitis, cough, no fever, aching.

O. Neg except for rhinitis.

A. Head cold.

P. Aspirin, Ornade, has cough syrup.

If you describe this in a line or two, it certainly is not necessary to SOAP the clinical note:

Episode "A" — U.R.I. Uncomplicated cold, Rx aspirin, Ornade, cough syrup.

A week or two later, if this patient comes in with a laceration on his leg, it would be listed under Problem #2 Acute Episodes, Laceration, but the management described on the Acute Episode Sheet as, Episode "B" — again, an acute, self-limiting problem. If you wish to SOAP it on the Acute Episode Sheet, "S" is the history of the laceration, "O" is a description of the wound, "A" is the type of laceration as to severity and location, and "P" is your treatment including the Tetanus shot, if necessary.

The follow up of a week later would record:

Episode "B" — Laceration. Wound healed well. remove sutures.

Another use for this acute episode sheet is to use it as a work sheet for more complicated episodes.

This same patient may come in 6 months later with acute abdominal pain, bloody diarrhea and anorexia. A wbc in your office is 18,000 with a shift to the left. And you decide to admit him to the hospital. The acute episode sheet would look like this:

Episode "C" — Abdominal Pain.

S. 2 days duration of belly pain with bloody diarrhea, nausea and anorexia. Has had some cramping with constipation past month aggravated by strawberries. Most of the pain is in lower abdomen.

O. Acutely tender lower abdomen with positive rebound more to left. wbc 18,000 with shift to left.

- A. Differential diagnosis is bowel obstruction due to CA or diverticulitis, perforation of bowel, appendicitis.
- P. To hospital for proper workup and surgical consultation.

At the hospital, consultation, x-rays and observation made the diagnosis of Diverticulitis (acute). So this now becomes Problem #6 — Diverticulitis, and your initial plan would be a copy of your SOAPed discharge summary from the hospital. Of course, this discharge summary would also have a note on Problem #4 — Diabetes, and how these two problems interacted.

Discharge Summary: John Doe, Admitted July 15, 1974, Discharged July 25, 1974.

Problem #6 — Diverticulitis.

- S. Admitted to hospital for abdominal pain, bloody diarrhea, and elevated white count. Course in hospital was uneventful on diet control, IV fluids, sedation and bed rest, and antibiotics.
- O. Acutely tender left lower quadrant with suggestion of a mass. Colon x-ray shows diverticulitis descending colon and Sigmoid, wbc 20,500 with shift to left.
- A. Diverticulitis without abscess or perforation.
- P. Patient discharged on increased bulk diet. Restrictions of seeds and spices. Donnatal tid as needed.

Problem #4 — Diabetes.

- S. No complaints on admission — carefully watched to see if diabetes effected. Fractional urines were 2 to 4+. Insulin increased on admission and gradually decreased as UA became neg to pre-admission level.
- O. F.B.S. on admission 300 mg%. F.B.S. on day of discharge 140 mg%.
- P. Continue Lente insulin 20 units in a.m. Visit with nutritionist concerning diet in light of Problem #6.

When the acute episode sheet is full, it can be moved to the back of the chart or filed in some other location for unlikely future use. This minimizes paper and information pollution

which gets in the way of important information retrieval and is a strong deterrent to the successful use of medical records of all types, including POMR.

SUMMARY

This paper shows one way of keeping useful, well-structured records in the Problem Oriented tradition that fulfills most of the criteria of good record keeping. After noting what the ideal record is, a general outline of the theory of Problem Oriented records is given, and how it could solve some of the record keeping problems in a physician's office.

A patient is followed from the time he first presents himself at a family practice office for a complete workup with both chronic problems and acute episodic illness and injury.

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Saline Abortion**

H. Aubry Talley, M.D.*

The termination of pregnancy during the middle trimester, that is, between the twelfth and twentieth week, for whatever indication, may be accomplished in a variety of ways, i.e. instillation of 50% glucose, rivanol, prostaglandins, hypertonic saline, foreign bodies, etc., into the uterine cavity trans-abdominally with or without trans-vaginally intravenous pitocin or prostaglandins. The specific method for discussion is intra-amniotic instillation of hypertonic saline solution, currently the most accepted technique of second trimester abortions in the United States. The actual technique of intra-amniotic saline instillation is relatively simple and should a few precautions be followed, the complication rate should be very low.

When patients are seen in our clinic past the twelfth week of gestation with a uterus of twelve weeks size or greater, but less than 16-18 weeks size, we usually postpone the procedure for several reasons. First of all, the volume of amniotic fluid between the twelfth and sixteenth week of pregnancy is rather small, thus allowing instillation of a smaller quantity of hypertonic saline and resulting in a prolonged injection to abortion time, if indeed the amniotic sac can be tapped at all. Secondly, the fetal membranes generally do not fuse with the uterine wall until the 14th or 16th week of gestation, therefore it is often difficult to enter the amniotic sac with a large bore needle until this fusion has occurred. For these reasons, we prefer intra-amniotic instillation of saline between the 16th and 18th week of gestation.

The patient is admitted on the morning the procedure is to be carried out, and an intravenous infusion of 5% dextrose and water is begun through an 18 gauge medicut. These patients routinely have their blood type and Rh type determined prior to abortion and if they are Rh negative they are given Rho-Gam within 72 hours of abortion. Also, as a part of our pre-operative routine, complete blood count, VDRL, Pap smear, GC culture and urinalysis are obtained. Any patient with any medical or surgical

complications will receive further evaluation depending on a particular complication and the indication for abortion. The patient is not sedated so that any intravenous infusion of saline may be detected immediately. The patient is instructed to empty her bladder; she is placed in a hospital bed and her abdomen is bared from the symphysis pubis to above the umbilicus and her abdomen is then painted with a solution of Thiomersol. One percent Xylocaine is used to anesthetize the skin and the subcutaneous tissue down to and through the fascia. A small amount, usually one to two cc's of Xylocaine is then used to anesthetize the peritoneum.

Following anesthesia a three and one-half inch 18 or 20 gauge spinal needle is introduced into the amniotic cavity. Return of blood through the needle once the stylet is removed, or failure of free return of clear amniotic fluid necessitates repositioning the needle until a free flow of clear amniotic fluid is obtained. A three-way stop cock is placed on this needle and a solution of 20% sodium chloride solution in an intravenous bottle is attached to one of the arms. In order to prevent the administration of 20% sodium chloride solution through the patient's intravenous infusion, we usually add a small quantity of methylene blue to the intravenous bottle containing 20% solution sodium chloride so that inexperienced personnel will be less likely to connect the 20% saline to the patient's IV fluid.

At this point as much amniotic fluid as can be withdrawn from the uterine cavity is removed. We usually remove at least 150 cc's of amniotic fluid from patients in their 16th to 18th week of gestation. The hypertonic sodium chloride solution is then instilled into the amniotic cavity in 50 cc increments with aspiration after each 50 cc's to insure correct needle placement. We usually try to instill slightly more of the 20% sodium chloride solution has been infused into than that amount of amniotic fluid which was removed, that is, we usually *over distend* the uterine cavity by 25 to 50 cc's after the 20% sodium chloride solution has been infused into the uterine cavity. The stylet is replaced into the spinal needle to avoid aspiration of 20% saline along the needle tract which is removed and a small *band aid* is placed over the puncture.

*Chief Resident, Department of Obstetrics and Gynecology, University of Arkansas School of Medicine, 4301 West Markham, Little Rock, Arkansas 72205.

**Presented at the 98th Annual Meeting of the Arkansas Medical Society, April 28-May 1, 1974, Little Rock, Arkansas.

During instillation of the hypertonic sodium chloride solution the patient's vital signs are monitored closely and she is instructed to report any headaches, visual disturbances, tingling in her toes or fingers which might indicate intravascular administration of the hypertonic saline. The intra-amniotic infusion is immediately discontinued if intravenous infusion is suspected.

After completion of the instillation of the hypertonic sodium chloride solution, the patient's vital signs are again monitored closely for at least two hours and if they remain stable during this time, she is given Pitocin, 20 units in each IV bottle, each 1000 cc's of intravenous fluids, alternately D5W and D5 half normal saline to run over a six-hour period, that is, the patient receives 80 units of Pitocin in a 24-hour period. The nursing personnel are instructed to watch the patient closely for bleeding, either per vagina or from venipuncture or intravenous infusion sites, cramping, or passage of tissue, and we monitor their urinary output and their intake of intravenous fluids.

Patients are allowed a liquid diet until they begin active labor. We find that they usually begin uterine cramping within 30 minutes to one hour after instillation of saline and initiation of Pitocin drip. The induction to abortion interval has been variably reported as 24-36 hours

with 80% to 95% aborting completely. Patients who do not begin labor may have a second instillation of saline 36-48 hours later either via the intra or extra-amniotic route. The patients who require a second injection of saline will also have determination of serum electrolytes to avoid imbalance secondary to intravenous pitocin and increased sodium absorption from the amniotic cavity.

After the patients abort we usually observe them for 30 minutes to one hour unless heavy vaginal bleeding supervenes in an attempt to let them pass the placenta spontaneously. If, at the end of one hour, they have not passed all placenta spontaneously, or should they begin heavy bleeding, they are taken to the operating room where a "sponge-stick" curettage is carried out to remove remaining placental fragments. All patients are taken to the operating room post-abortion and examined for cervical or vaginal tears or retained placenta fragments. The patients are then taken to the recovery room where they are given additional intravenous Pitocin and Ergot derivatives by mouth. They are usually discharged within 12 to 18 hours of abortion if they have no excessive vaginal bleeding and are afebrile and have stable vital signs. Again, any patient who is Rh negative, is given Rho Gam before her discharge from the hospital.

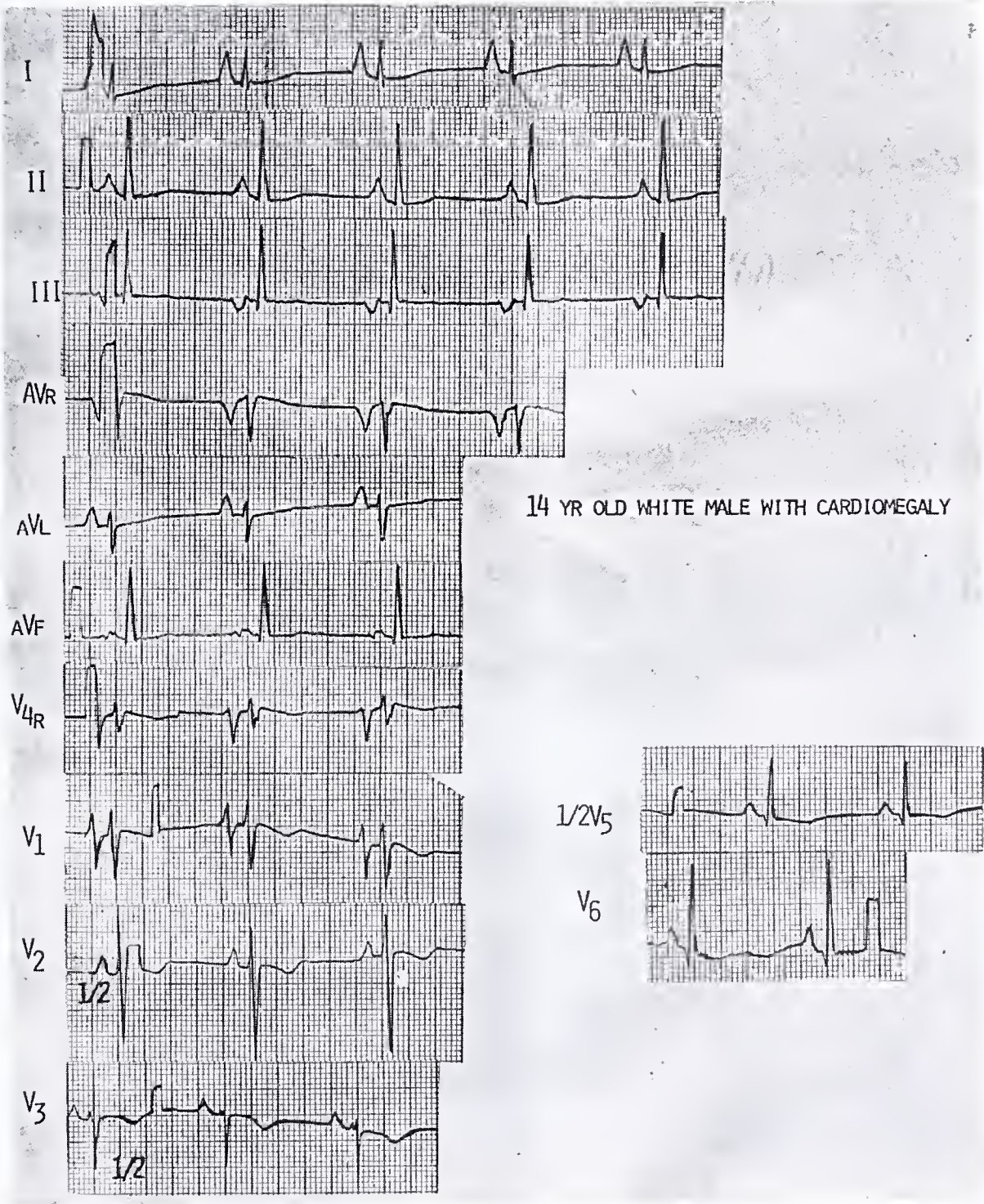




ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center
(See Answer on Page 134)



John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205

Cervical Disc Syndrome

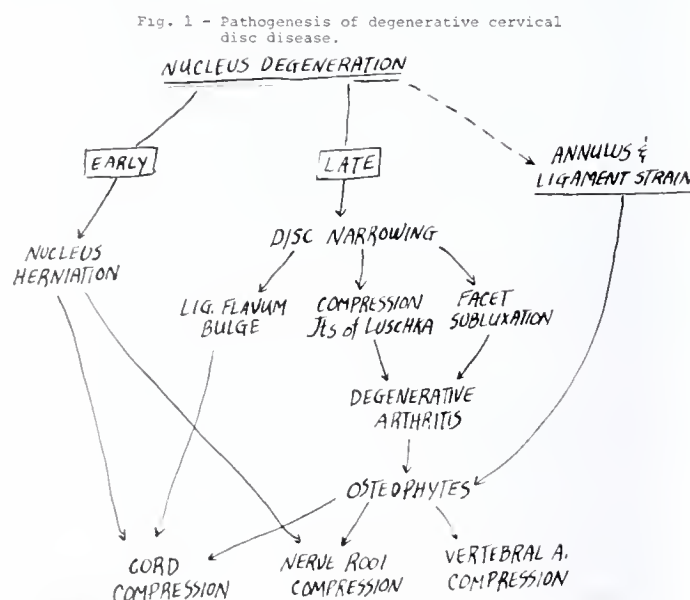
Philip H. Johnson, M.D.*

The most common cause for neck pain seen in the office of the orthopedist is degenerative cervical disc disease. Everyone who reaches the sixth decade of life will have had symptoms referable to this normal aging process, though they may not require medical attention. The purpose of this report is to classify the syndromes characteristic of this process and to show that each is but a chapter in the natural history of this intriguing story spanning several decades.

The intervertebral discs act as cushions or shock-absorbers for the spine. They permit all bending and rotation of the spine by deformation (compression on one side while elongating on the other). Over a period of years these forces, sometimes extreme, produce chemical and physical changes in the nucleus pulposus and its surrounding annulus fibrosus (Fig. 1). The nucleus

pulposus, once gelatinous, changes with water resorption into a firm fibrous substance, resulting in a narrowed interspace. Narrowing of the intervertebral space produces subluxation of the articular facets and compression of the neurocentral joints of Luschka resulting in a degenerative arthritis of these synovial joints. This inflammatory reaction produces osteophytes (spurs) which are responsible for many of the disease symptoms. Further disc narrowing produces a telescoping effect on the cervical spine, resulting in an inward bulge of the ligamentum flavum, narrowing the spinal canal. The annulus fibrosus, after years of stretching and attrition may rupture, allowing herniation of nuclear material and/or the formation of osteophytes at points of greatest stress. In an attempt at repair, these spurs, forming on adjacent vertebral bodies, may even bridge the disc space. The resulting limitation of motion explains the scarcity of symptoms after age 65-70. Trauma in any form, no doubt, accelerates this degenerative process. This course of events, which is part of the normal aging process, is best described as "degenerative cervical disc disease". Osteoarthritis, osteophytosis, cervical spondylosis, all terms used in the past, describe only a narrow way the end result of the degenerative process originating in the nucleus pulposus.

Clinically four different syndromes emerge. The patient may present as any one, or as a combination of symptoms and signs taken from each classification. In general the process begins in the young adult as a discogenic syndrome, may progress to radicular arm pain with nerve root



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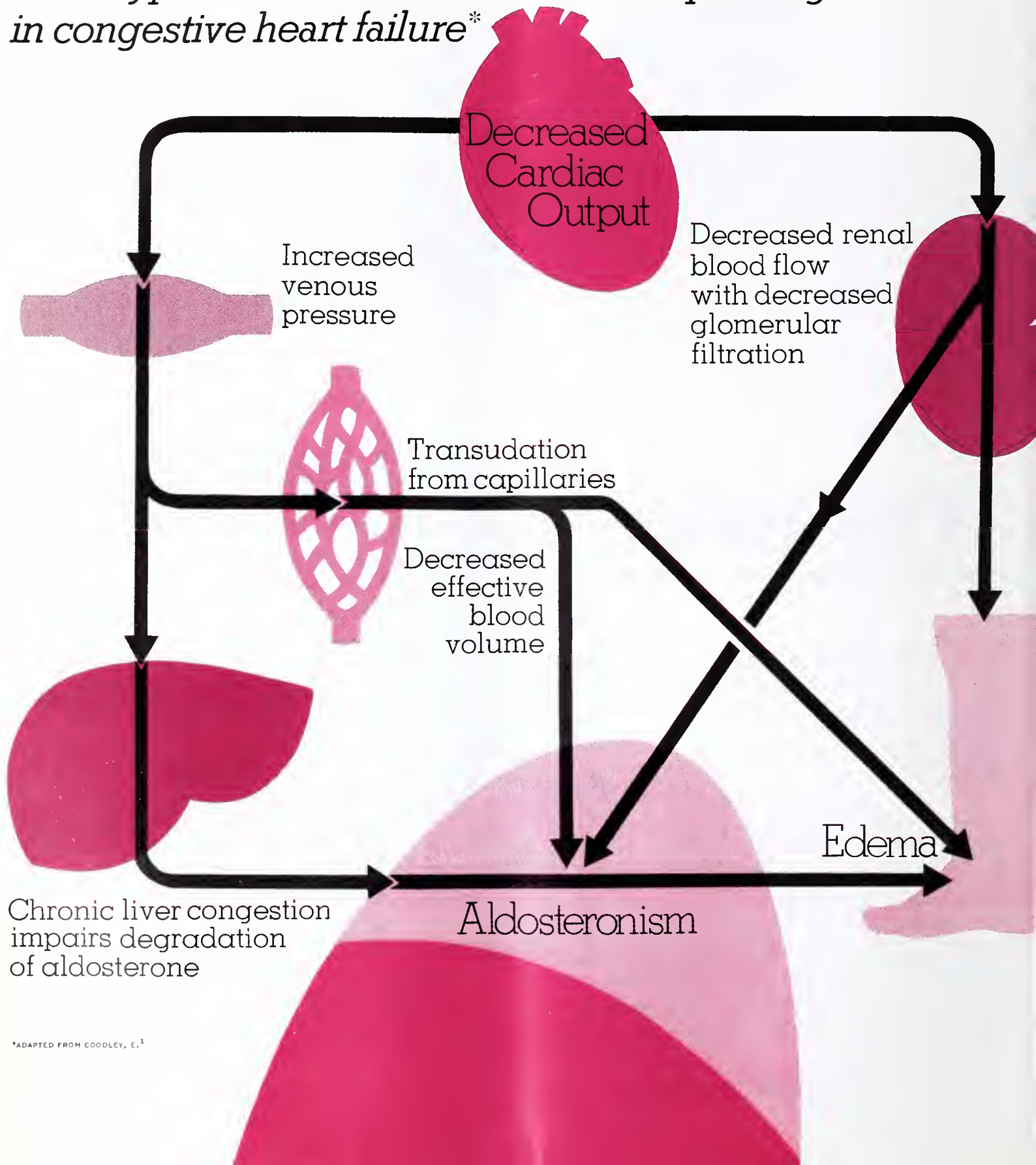
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- Can be administered daily as basic therapy with the additional agent (furosemide or ethacrynic acid) given every second or third day.
- Aldactone plus "A.D.D." schedule minimizes potassium deficiency and potentiates effect of "add-on" diuretic.²
- Avoids acute volume depletion and aldosterone rebound.²

3. As a daily diuretic in combination with a daily dose of a thiazide

- Permits daily additive diuretic effect while maintaining potassium balance.

Indications—Essential hypertension; edema or ascites of congestive heart failure, cirrhosis of the liver and the nephrotic syndrome; idiopathic edema. Some patients with malignant effusions may benefit from Aldactone (spironolactone), particularly when given with a thiazide diuretic.

Contraindications—Acute renal insufficiency, rapidly progressing impairment of renal function, anuria and hyperkalemia.

Warnings—Potassium supplementation may cause hyperkalemia and is not indicated unless a glucocorticoid is also given. Discontinue potassium supplementation if hyperkalemia develops. **Usage of any drug in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the mother and fetus.**

Precautions—Patients should be checked carefully since electrolyte imbalance may occur. Although usually insignificant, hyperkalemia may be serious when renal impairment exists; deaths have occurred. Hyponatremia, manifested by dryness of the mouth, thirst, lethargy and drowsiness, together with a low serum sodium may be caused or aggravated, especially when Aldactone is combined with other diuretics. Elevation of BUN may occur, especially when pretreatment hyperazotemia exists. Mild acidosis may occur. Reduce the dosage of other antihypertensive drugs, particularly the ganglionic blocking agents, by at least 50 percent when adding Aldactone since it may potentiate their action.

Adverse Reactions—Drowsiness, lethargy, headache, diarrhea and other gastrointestinal symptoms, maculopapular or erythematous cutaneous eruptions, urticaria, mental confusion, drug fever, ototoxicity, gynecomastia, inability to achieve or maintain erection, mild androgenic effects, including hirsutism, irregular menses and deepening voice. Adverse reactions are infrequent and usually reversible.

Dosage and Administration—For **essential hypertension in adults** the daily dosage is 50 to 100 mg. in divided doses. Aldactone may be combined with a thiazide diuretic if necessary. Continue treatment for two weeks or longer since an adequate response may not occur sooner. Adjust subsequent dosage according to response of patient.

For **edema, ascites or effusions in adults** initial daily dosage is 100 mg. in divided doses. Continue medication for at least five days to determine diuretic response; add a thiazide or organic mercurial if adequate diuretic response has not occurred. Aldactone dosage should not be changed when other therapy is added. A daily dosage of Aldactone considerably greater than 75 mg. may be given if necessary.

A glucocorticoid, such as 15 to 20 mg. of prednisone daily, may be desirable for patients with extremely resistant edema which does not respond adequately to Aldactone and a conventional diuretic. Observe the usual precautions applicable to glucocorticoid therapy; supplemental potassium will usually be necessary. Such patients frequently have an associated hyponatremia—restriction of fluid intake to 1 liter per day or administration of mannitol or urea may be necessary (these measures are contraindicated in patients with uremia or severely impaired renal function). Mannitol is contraindicated in patients with congestive heart failure, and urea is contraindicated with a history or signs of hepatic coma unless the patient is receiving antibiotics orally to "sterilize" the gastrointestinal tract.

Glucocorticoids should probably be given first to patients with nephrosis since Aldactone, although useful for diuresis, will not directly affect the basic pathologic process.

For **children** the daily dosage should provide 1.5 mg. of Aldactone per pound of body weight.

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Antivert[®] (meclizine HCl) has been found useful in the management of vertigo associated with diseases affecting the vestibular system. It is available as Antivert/25 (25 mg. meclizine HCl) and Antivert (12.5 mg. meclizine HCl) scored tablets for convenience and flexibility of dosage. Antivert/25 (25 mg. meclizine HCl) Chewable Tablets are available for the management of nausea, vomiting, and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

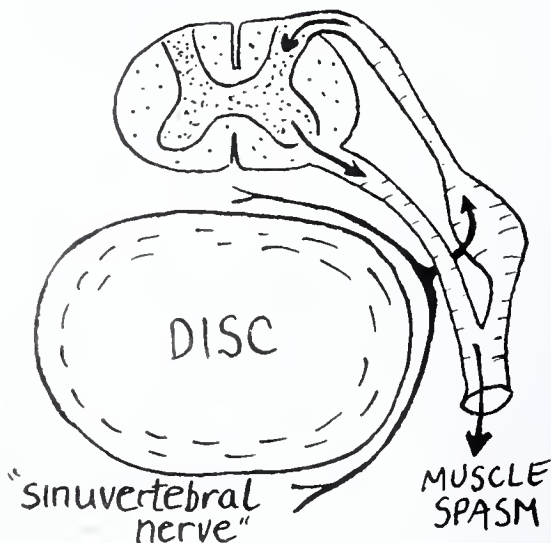
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compression and later in middle age result in the chronic degenerative stage. Rarely spinal cord compression may be present.

I. DISCOGENIC SYNDROME

The initial symptom is frequently a crick in the neck (stiffness) on arising in the morning which spontaneously subsides. There may be an aching pain in the neck and shoulder and infrequently in the upper arm. The pain radiates to the periscapular region where it is usually localized by the patient at the upper vertebral border of the scapula. Headache is a prominent feature. It is characterized as a dull aching, episodic, sometimes throbbing pain beginning in the suboccipital region, usually unilateral (sometimes bilateral), radiating mysteriously into the temple and retro-orbital region. Bulging of the annulus, anterior or posterior longitudinal ligaments, initiates sensory afferent impulses in the "sinuvertebral nerve" (Fig. 2). Stimulation of this nerve produces reflex involuntary muscle spasm in the trapezius, rhomboid, and scalene muscles. Impulses also travel via the cervical sympathetics along great vessels into the neck and head, explaining the facial component to the headache. On physical examination there is limitation of motion of the cervical spine due to muscle spasm; a "lumbago-like" syndrome in the neck. Some crepitus and grinding (audible and palpable) can often be demonstrated by the patient on active range of motion testing. X-rays of the cervical spine at this early stage are usually negative. However, on the lateral flexion view a flattening of the normal symmetric curve may be seen while following an imaginary line down

Fig. 2 - The sinuvertebral nerve.



the posterior side of the vertebral bodies. The apex of the angulation identifies the diseased disc space (Fig. 4, C4-5).

II. ACUTE HERNIATED NUCLEUS PULPOSUS (Acute Soft Disc) (Cervical Disc Syndrome) (Cervical Radiculopathy)

To the discogenic symptoms is added the signs and symptoms of nerve root compression as the herniated "soft disc" impinges the nerve root posterolaterally (Fig. 3). In addition to neck and periscapular pain, there is now true "radicular pain" of a lancinating character, and distributed along a characteristic dermatome segment (Table I). Pain is often increased with coughing, sneezing, straining, and with motion of the neck, particularly in extension and rotation. There may also be numbness and paresthesias along with muscle weakness and hyporeflexia in a typical pattern. Pain may even extend into the precordial and pectoral regions simulating angina pectoris. The "neck compression test" will be positive and should be done with care (pressure on the vertex of the head with the neck tilted to the painful side intensifies the neck pain, and reproduces the nerve root pain in the arm, forearm, and hand). Tenderness is present over the brachial plexus and more specifically in the posterior cervical region at the level of the diseased disc. Patients with soft disc herniations are usually young adults (age 20 to 40) and less than 30% of these patients have a definite history of trauma. Very rarely (2% of cases) does an automobile accident precipitate frank herniation. X-rays may be normal. Mye-

Fig. 3 - Acute soft disc herniation.

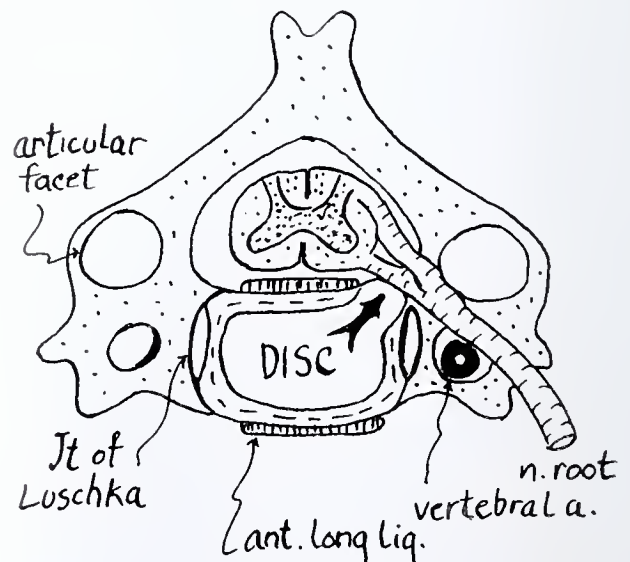


Table I - Dermatome patterns.

	C4-5 (5th nerve root)	C5-6 (6th nerve root)	C6-7 (7th nerve root)	C7-T1 (8th nerve root)
PAIN	Base of neck - Tip of shoulder - Arm to elbow -	Lateral arm and forearm	Lateral arm and forearm	Ulnar distribution of arm, forearm, and hand in older patient
NUMBNESS	Over deltoid	Thumb Radial side hand	Index and middle dor- sum, hand	Ring and little finger
REFLEX	Biceps reduced	Biceps re- duced or absent	Triceps re- duced or ab- sent	(no changes)
WEAKNESS	Deltoid - Biceps -	Biceps -	Triceps -	Intrinsic muscles of hand

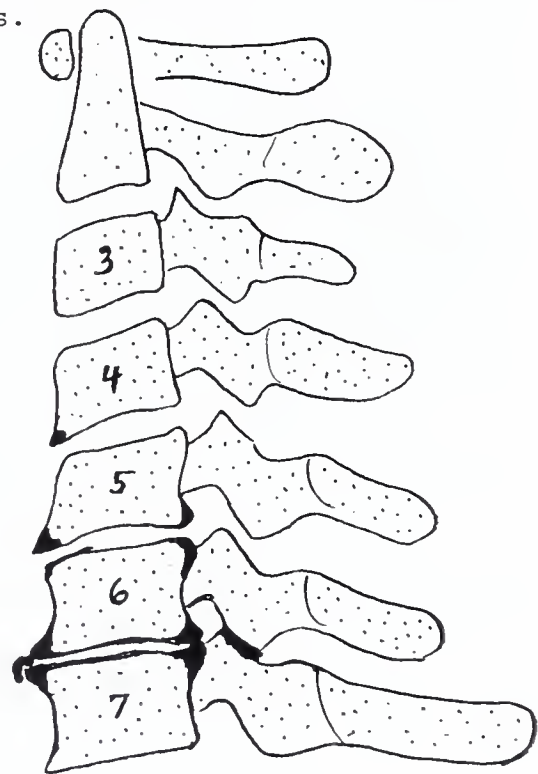
lography will show an extradural filling defect if a significant herniation is present.

III. CHRONIC DEGENERATIVE DISC DISEASE (Osteoarthritis) (Osteophytosis) (Cervical Spondylosis)

After age 35 to 40, and usually after years of discogenic neck pain, significant nuclear degeneration and disc narrowing have occurred resulting in osteophytes about the joints of Luschka and the margins of the vertebral bodies. At this stage an acute soft disc herniation is more unusual. Discogenic neck pain and headache continue with poorly localized aching pain to the occiput, shoulder girdle, and the periscapular region. Dysphagia may be produced by the pressure of anterior spurs on the esophagus. Encroachment of the vertebral artery, by osteophytes, may produce ischemia; with rotation and extension of the neck, giddiness, dizziness, and "drop attack" (syncope) may occur. X-rays reveal the sequelae of nuclear degeneration (Fig. 4). Disc space narrowing is present with first anterior inferior osteophyte formation at the insertion of the anterior longitudinal ligament. Posterior spurs develop at points of ligament traction and appear as "bars" on the myelogram. Oblique views show foraminal encroachment by spurs at the joints of Luschka, and more rarely at the articular facets. As osteophyte formation and disc narrowing progresses, limitation of motion on the flexion-extension view is seen as well as asymmetric flexion more readily seen on cineradiography. Myelography during this stage

Fig. 4 -

Panorama of degenerative disc disease, portrayed in increasing severity: C3-4 normal; C4-5 early changes; C5-6 moderate disease; C6-7 chronic changes.



is rarely necessary and is recommended only for localization of persistent soft disc herniation or for evidence of cord compression. Discography is of little practical value. Electromyography is not necessary for diagnosis but is helpful to rule out peripheral nerve compression and entrapment syndromes, peripheral neuritis, and for medical-legal documentation.

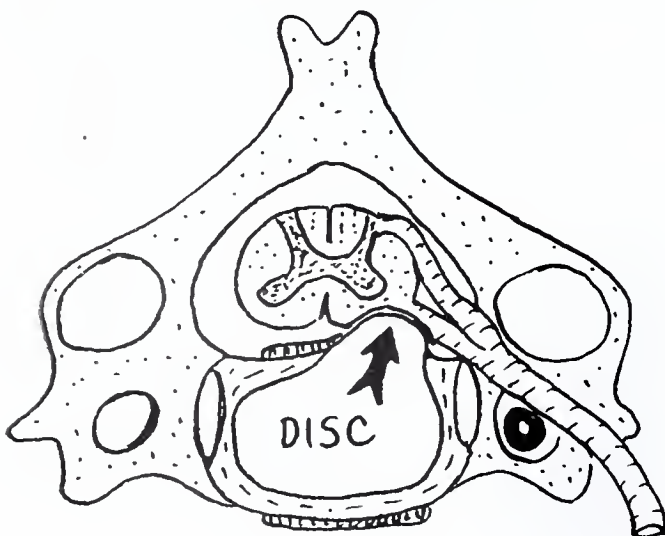
IV. CORD COMPRESSION SYNDROME (Cervical Myelopathy)

Compression of the spinal cord is a rare occurrence in cervical disc disease varying from 2 to 8% of the total cases depending on the series. It may be present at any stage of the disease with a significant nuclear herniation. In advanced chronic disc disease telescoping of the vertebral bodies and laminae produce compression of the cord between a bulging ligamentum flavum dorsally on the cord and a large posterior vertebral "bar" anteriorly ("spinal stenosis"). A hypermobile (unstable) spine or a congenitally narrow canal may predispose to cord compression. Two cord compression syndromes may be recognized.

The first is a central (bilateral; ventral) compression. Little or no neck pain is present. There is limitation of motion in flexion and extension. Acute flexion produces electric shock-like pain in the neck, back and lower extremities. Flaccid paralysis or weakness associated with atrophy is present in the upper extremities from anterior horn cell compression. Spasticity is present in the lower extremities associated with hyporeflexia, clonus, positive Babinski, and loss of cremasteric and abdominal reflexes. There also may be loss of sphincter control. Pain and temperature sensation may be lost in upper and lower extremities while proprioception and vibration are spared.

The second syndrome is that of ventrolateral (unilateral) compression usually from a soft extruded disc (Fig. 5). Compression of a nerve root and one side of the cord ventrally is present.

Fig. 5 -
Ventrolateral disc herniation.



Pain and stiffness in the neck is usually present as well as pain and weakness along the nerve root in the upper extremity. The cord lesion simulates an incomplete Brown-Sequard syndrome. There are unilateral pyramidal tract signs in the leg on the same side (spasticity, weakness, and hyperreflexia); diminished pain and temperature sensation in the opposite leg; and focal atrophy in the upper extremity (flaccid paralysis) on the same side. Spinal tap with Queckenstedt test as well as myelography is usually indicated to adequately localize the lesion, and rule out cord tumor and degenerative disease of the cord.

ALLIED CONDITIONS

1. *Fibrositis*—This condition usually occurs in nervous introverted individuals. The pain is characteristically described as an aching, gnawing pain in the region of the trapezius and rhomboids between the base of the neck and the shoulder associated with involuntary muscle spasm, palpated as "nodules". Occipital headache is frequent and trigger points may be found in the painful area. This vague syndrome is most likely cervical discogenic pain in origin referred to the base of the neck with secondary involuntary muscle spasm. In a nervous apprehensive person spasm perpetuates itself by exerting an irritating compression on the facet joints and soft tissues about the cervical spine.

2. *Scapulo-Thoracic Syndrome*—Pain at the superior angle and upper border of the scapula is typical of cervical discogenic pain. True scapulo-thoracic syndrome should be limited to the "snapping scapula" where bony impingement of the scapula on the chest wall produces easily palpable and usually audible sounds, and pain is definitely related to scapular movement.

3. *Scalenus Anticus Syndrome*—Stimulation of the sinuvertebral nerve produces involuntary spasm in the musculature about the cervical spine including the scalene muscles. This condition is described as an aching neck and shoulder pain radiating along the inner aspect of the forearm and hand (medial cord of the brachial plexus). Associated with it is numbness in the ulnar distribution of the hand and atrophy, if any, follows a peripheral nerve distribution (usually ulnar, sometimes median). Maximum point tenderness is in the supraclavicular region at the insertion of the scalene muscles on

the first rib. Neck pain is more anterior and is of a diffuse vascular nature. No doubt the vast majority of scalenus anticus spasm is due to cervical disc disease. The diagnosis of true scalenus anticus syndrome should be reserved for cervical ribs, long C-7 transverse process, or palpable fibrous bands in this region.

DIFFERENTIAL DIAGNOSIS

1. *Inflammatory Disease of the Shoulder* (subdeltoid bursitis, rotator cuff tendinitis, bicipital tenosynovitis) — Passive range of motion of the shoulder in these conditions produces marked increase in pain. Cervical compression test produces no increase in arm pain. It must be remembered, however, that "frozen shoulder" and inflammatory shoulder disease may be secondary to cervical disc disease, and the two conditions coexist.

2. *Angina Pectoris* — A left sided cervical disc may produce severe precordial chest pain, but angina increases with exertion and decreases with rest and nitroglycerin.

3. *Thoracic Outlet Syndrome* — (a) Scalenus anticus syndrome and cervical rib are discussed above. (b) Clavipectoral syndrome — compression of the neurovascular bundle between the rib cage and the clavicle or pectoralis minor may produce numbness and paresthesias in the hand and fingers in a very indistinct pattern, vascular compression produces coldness in the fingers with muscle cramps, cyanosis, and swelling from venous engorgement. Little or no neck pain is present. (c) Hyperabduction syndrome — may occur from stretching the neurovascular bundle around the axilla with the arms overhead. It is usually seen in short stocky males working for long hours with the arms above shoulder level. Obliteration of the radial pulse can be easily produced on abduction.

4. *Superior Sulcus Syndrome* (Pancoast's tumor) — Carcinoma of the lung in its apex can produce brachial neuralgia from direct invasion of the plexus. Pain is more diffuse than radicular and a Horner's syndrome is usually present. Chest film should clarify the diagnosis.

5. *Nerve Root Tumors* (Neurinoma) — Nerve root tumors in their early stages can exactly simulate an acute soft disc rupture and later produce cord compression.

6. *Degenerative CNS Disease* — In all cases of cord compression the following diseases must

be considered: syringomyelia, amyotrophic lateral sclerosis, posterior lateral sclerosis, multiple sclerosis, cord tumor. Thorough neurologic work-up with myelography is necessary.

7. *Arthritis* — Rheumatoid arthritis and Marie Strumpell arthritis frequently involves the articular facet joints posteriorly and are associated with ligamentous laxity. Clinical presentation along with x-rays and laboratory investigation usually make diagnosis uncomplicated.

8. *Miscellaneous* — Neck pain secondary to meningeal irritation with nuchal rigidity, tonsillitis, pharyngitis, and lymphadenitis, are usually diagnosed by a careful history and physical evaluation. Diaphragmatic irritation with referred pain to the shoulder likewise should not be confused with cervical pain.

TREATMENT

Conservative treatment is indicated initially in all these syndromes with the exception of cord compression where early surgical decompression is in general indicated.

Immobilization is the mainstay of treatment. Rest in a soft felt or foam collar provides relief for the inflamed soft tissues and restriction from irritating motion. The collar is worn on a 24 hour basis as long as acute symptoms persist. It is then gradually discontinued during the day, continuing use at night for a longer time to prevent awkward neck positions during sleep. Isometric (without motion) neck exercises in flexion, extension, and lateral bending restore strength as the collar is discontinued.

Head halter traction, usually quite effective, is best applied in a hospital environment where strict bed rest can be maintained. Five to ten pounds of traction should be applied pulling 30 degrees anterior to the midline. The patient remains in traction two hours out of every three (as he tolerates), and is usually discontinued at night. Intermittent traction is applied, by a trained physical therapist, in greater strength for short intervals. Traction may be continued at home either in bed or in the sitting position utilizing the "home traction kit".

Heat, muscle relaxants, sedatives, and analgesia are used for patient comfort. The anti-inflammatory effect of phenyl butazone may be beneficial but its serious side effects should be understood.

As long as the patient is not having serious

nerve root or cord compression signs, conservative treatment may be discontinued. Symptoms of severe continuous pain of acute herniation, however, may make surgical intervention necessary. During the chronic stages with persistent pain and disability, anterior disc removal and cervical fusion has been quite effective.

CONCLUSION

Disc disease in the cervical spine, as well as lumbar, is often a fascinating adventure in diagnosis. A clear understanding of the natural history of the aging disc and the applied stresses to which it is subjected makes treatment more effective for the patient and less frustrating for the physician.

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ANSWER—Electrocardiogram of the Month

Interpretation:

The size and shape of the P waves in this ECG are of major interest. They are huge, markedly diphasic in VI and strongly leftward as seen by their 5 mm height in lead I. Several conditions may cause giant P waves — carpal tunnel, pulmonary stenosis, tricuspid atresia, aortic stenosis, and ASD to mention a few. The tracing also shows voltage changes compatible with left ventricular hypertrophy. In this instance, this youth had a severe cardiomyopathy with a dilated non-contractile myocardium and bi-atrial enlargement.



PUBLIC HEALTH AT A GLANCE

Arkansas Therapeutic Abortions

Robert T. Bailey

The Arkansas Department of Health, through its Bureau of Vital Statistics, has set forth the reporting mechanism for legal or induced abortions in Arkansas. The statutory authority for this reporting is set forth in Arkansas Statute 82-502 and 82-521 as contained in the Vital Statistics Act of 1965 — Act. No. 471.

Statistical data on abortions in Arkansas has been gathered since January 1970 with all accredited hospitals in the state participating. The Arkansas Abortion Act of 1969 did not contain provisions for therapeutic abortions being per-

formed outside of a hospital. However, recent United States Supreme Court decisions have challenged certain concepts as contained in our Arkansas law. All legal abortions occurring in this state should be reported to the Bureau of Vital Statistics.

The following is selected statistical abortion data relating primarily to calendar year 1973. During 1973, 1,138 legal abortions were reported to the Bureau from the state's 93 reporting hospitals. Single white women under the age of 24 comprise over one-half of all legal abortions. Two-thirds of the reported abortions were per-

*Director, Bureau of Vital Statistics, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

formed on unmarrieds (single, divorced and widowed) in both 1972 and 1973.

While there was a decrease in married women in 1972 seeking legal abortions nationwide, Arkansas has seen a steady increase. From 1971

through 1973 there has been an increase from 31 percent to 32.5 percent.

In 1972, the national percentage of white women obtaining abortions was 75.7 percent, in Arkansas 89.9 percent. Seven times as many

ARKANSAS LEGAL ABORTIONS
By Age of Mother and Race

TABLE I

1973

<u>Age</u>	<u>All Races</u>	<u>White</u>	<u>Non-White</u>
12	1	0	1
13	12	9	3
14	27	17	10
Under 15	40*	26*	14*
15	63	53	10
16	79	70	9
17	76	72	4
18	122	112	10
19	85	75	10
15 - 19	425*	382*	43*
20	84	75	9
21	70	63	7
22	52	48	4
23	39	34	5
24	47	40	7
20 - 24	292*	260*	32*
25	47	38	9
26	39	35	4
27	21	17	4
28	21	21	0
29	26	24	2
25 - 29	154*	135*	19*
30	23	20	3
31	22	18	4
32	19	16	3
33	25	21	4
34	15	10	5
30 - 34	104*	85*	19*
35	14	14	0
36	23	23	0
37	17	15	2
38	16	16	0
39	17	13	4
35 - 39	87*	81*	6*
40	4	4	0
41	9	9	0
42	10	9	1
43	5	4	1
44	5	5	0
45	2	2	0
48	1	1	0
40 & over	36*	34*	2*
GRAND TOTALS	1,138	1,003	135

* Sub Totals

ARKANSAS LEGAL ABORTIONS
By Marital Status and Race

TABLE II

1973

<u>Marital Status</u>	<u>All Races</u>	<u>White</u>	<u>Non-White</u>
Single	669	580	89
Married	370	327	43
Separated	15	14	1
Divorced	82	80	2
Widow	2	2	0
GRAND TOTALS	1,138	1,003	135

ARKANSAS LEGAL ABORTIONS
By Gestational Age and Race

TABLE III

1973

<u>Gestational Age (In Weeks)</u>	<u>All Races</u>	<u>White</u>	<u>Non-White</u>
2	1	1	0
3	0	0	0
4	6	5	1
Under 5	7*	6*	1*
5	11	11	0
6	54	51	3
7	103	91	12
8	245	222	23
5 - 8	413*	375*	38*
9	167	152	15
10	195	183	12
11	96	86	10
12	114	98	16
9 - 12	572*	519*	53*
13	33	27	6
14	17	11	6
15	11	8	3
16	38	25	13
13 - 16	99*	71*	28*
17	9	6	3
18	28	19	9
19	4	3	1
20	4	2	2
17 - 20	45*	30*	15*
21	0	0	0
22	1	1	0
23	1	1	0
24	0	0	0
21 - 24	2*	2*	0*
GRAND TOTALS	1,138	1,003	135

* Sub Totals

white women had abortions than their non-white counterparts in 1973. According to the Center for Disease Control's *Abortion Surveillance Report for 1972*, ten states reported that legal abor-

tions outnumbered live births for women under 15 years of age; by contrast in Arkansas there were 21 legal abortions to 187 live births in this category.

ARKANSAS LEGAL ABORTIONS
By Indication and Race

TABLE IV

1973

<u>Indication</u>	<u>All Races</u>	<u>White</u>	<u>Non-White</u>
Maternal Mental Health	824	735	89
Maternal Physical Health	99	77	22
Combined Maternal Mental and Physical Health	193	169	24
Risk of Fetal Deformity	19	19	0
Rape or Incest	1	1	0
Fetal Anomalies	2	2	0
GRAND TOTALS	1,138	1,003	135



EDITORIAL

Cardiac Care Units

Alfred Kahn, Jr., M.D.

Cardiac care units have publicized the fact that many people with myocardial infarctions can be saved from sudden death by appropriate quick medical treatment. Statistics do not show the major reduction in mortality that was first expected. However, if all myocardial infarction victims are divided into subgroups, then statistical benefit can be demonstrated, for example, in younger males.

This failure to demonstrate striking improvement in mortality among infarction cases lead to some re-appraisals. Were cardiac care units worth their expense? The answer is definitely "yes" if the total problem is looked at in con-

text — namely, our current cardiac care units are just one link in a chain of care for patients with myocardial infarction. Viewed as a helpful segment in the systematic care of the patient, the next question is begged, what else do we need?

Probably, the first link in the chain is better education of the public about medical first aid. This problem has deep roots. The real starting point is that every school child should be taught some human anatomy and physiology just as he is taught English or mathematics. It is rather incredible that the lay public with the tremendous stimulus given to science affairs by television has not demanded better education con-

cerning the bodies that we live in — anatomy, physiology, simple first aid. Actually, the second link in this chain is to teach some cardio-pulmonary resuscitation, and the ability to recognize the victim who needs it.

The cardiac victim has to be moved to the hospital. The converted station wagon-type ambulance is totally unacceptable. The best vehicle is a van-type vehicle with a high enough roof to permit the continuation of cardiac resuscitation in route to the hospital. The vehicle has to be big enough to contain some basic electronic equipment. At this juncture it should be pointed out that an ambulance that is not available need not be bought; there needs to be some dispersion of these units and there has to be some emergency call system.

Once in the hospital, the patient should be moved rapidly to a cardiac care unit. The resuscitation techniques in the cardiac care unit are well known. They include de-fibrillators, pace-makers, various I-V fluids, etc. The usual medical staff is well trained and a good job is almost invariably done.

Nevertheless, patients are lost in cardiac care units. Why? The main current effort in cardiac care units is to prevent deaths from arrhythmias. The other big killer is death from pump failure — the inability of the heart to pump enough blood to meet the body's minimal need.

A great deal of thought has gone into the matter of dealing with the low output heart failure of myocardial infarction, which is due to a portion of the ventricle which has become hypokinetic, dyskinetic, or akinetic. The subject of "Mechanical Assistance for the Failing Ventricle" has been recently reviewed by Leon Resnekor in *Modern Concepts of Cardiovascular Disease*. As he points out, medications are not very effective in serious pump failure and for this reason mechanical devices have been tried. Resnekor divides the measures up as follows: (1) Invasive: Bypass pumps which go around the left side of the heart or are veno-arterial, diastolic augmentation counterpulsation by intra-aortic balloon, or direct compression of the heart; (2) Non-invasive methods as: External synchronous compression by compression of the extremities, body acceleration on a special table to augment the systolic blood flow, and external

compression of the heart. It is no professional secret that none of these techniques have proved very satisfactory. This failure to achieve good results in the very low cardiac output failure unquestionably led to the rash of cardiac transplants of several years ago. Perhaps, with better immunologic control cardiac transplant can become a worthwhile procedure — provided it can be ethically and legally performed to the satisfaction of the public as well as the medical profession. In the wings, so-to-speak, are experiments on true mechanical hearts; no doubt a successful heart will be built some day; it is not ready yet — before it can be used there will have to be a clear-cut code of how and when it can be used.

Research in heart disease can pay rich dividends — especially in the epidemic arteriosclerotic heart disease prevalent in the USA.



O B I T U A R Y

Dr. John Maurice Samuel

Dr. John M. Samuel of Little Rock died July 4, 1974, at the age of 64.

Dr. Samuel received his M.D. degree in 1933 from the University of Arkansas School of Medicine. He had been in private practice in Little Rock since 1935 and had served on the staff of Saint Vincent Infirmary since that time. He was a member of GP Associates, a group of physicians formed to ensure twenty-four service at the Saint Vincent emergency room. Dr. Samuel was chairman of the Infirmary's Utilization Review Committee. He also had served as chairman of St. Vincent's Credentials Committee and as chief of the hospital's department of family practice.

Dr. Samuel was a member of the Pulaski County Medical Society, Arkansas Medical Society, and the American Medical Association.

He is survived by his widow, Irene.

MEDICINE IN THE



THE MONTH IN WASHINGTON

With the exception of a possible last-minute catastrophic bill to the liking of both the Senate and the House, the prospects for a national health insurance (NHI) bill this year appear to be fading. Preoccupied with the possible impeachment, plus other matters, the pace of House and Senate hearings on NHI has definitely slowed, despite a strong desire on the part of both Republicans and Democrats to take a widely popular health measure with them to the polls this November.

Its late April testimony on NHI before the House Ways and Means Committee behind it, the American Medical Association again advanced its Mediredit proposal for NHI before the Senate Finance Committee at the end of May.

Senate Finance Committee Chairman Russell Long (D-La.) and other committee members heard AMA President Russell Roth, M.D., President-elect Malcolm Todd, M.D., and Ernest Livingstone, M.D., chairman of the AMA Legislative Council, support the Mediredit measure.

"As the nation's largest association of actively practicing physicians, the ones who will be called upon to provide the professional services which are contemplated under any program which may be authorized by Congress, we feel that our viewpoints are extraordinarily important," Dr. Roth told the committee.

"If we are to meet the principal needs not only of the aged and the poor but of the vast middle income group, it would seem we must endeavor to provide basic coverage for medical service and, if possible, add to this protection against ruinous catastrophic major medical expense (Senators Long and Abraham Ribicoff (D-Conn.) are sponsors of a catastrophic-only type NHI proposal).

"We appreciate the economies of providing only catastrophic coverage, but feel that it will meet too few of the needs and will prove very difficult to administer. We appreciate the appeal

of first dollar coverage but recognize the inordinate expense involved.

"The catastrophic coverage should be adjusted to ability to pay, since it is obvious that an amount which could be easy for the well-to-do family to pay could be disastrous for the much larger group of middle and low-income individuals. If the insurance is really to protect, it must be operative at the level of need.

"If I provide \$10 worth of service for my patient and he pays me directly, I have earned \$10 and he has spent \$10. If, instead, money is to be collected from the patient as a tax to be transmitted to Washington, processed, transferred to another agency, processed, passed on to an intermediary, processed, and paid out as a benefit, and then reviewed for appropriateness, I will need to leave it to others to estimate how much more must be collected from the patient to yield the \$10 necessary to cover the service rendered. Each complicating step in the process contributes to a shrinkage in service purchased by the medical dollar.

"We believe that the public will look with dismay on a financing mechanism which increases the Social Security tax by 4 per cent, as with the Kennedy-Mills proposal.

"We have enthusiasm for the financing mechanism in the Mediredit bill which uses tax credit to minimize the number of dollars making a round trip to Washington as tax to return as a shrunken benefit, and which place the obligation to contribute their share on those who have the ability to pay all or part of their premium cost. It uses an existing governmental collection agency, minimizes new demands for an increase in bureaucracy, and reduces administrative costs.

"Finally, there is the matter of administering the program. There is precious little evidence that any particular economy or efficiency results from government health programs, but a growing body that the opposite may be true.

"In the case of National Health Insurance, we

feel assured that if any part of the funding derives from Social Security taxes there would be a compulsion for Social Security control of the program.

"We are confident that the administration of the program will best be accomplished by existing private entities in the field. Federal involvement, while inescapable when dealing with federal tax dollars, should be kept minimal.

"We again believe that our Mediredit program fulfills these objectives in respect to administration more aptly than does any other proposal to date. We believe the public, in opinion poll after poll, has reiterated its high degree of confidence in the medical profession and its low esteem for bureaucratic administration. We believe that there is validity in other current public opinion polls which indicate that the chief national concern is over inflation," Dr. Roth concluded.

After Dr. Roth had read the statement, Chairman Long said he agreed with the many things that were said by the AMA official, especially the concern about wastage of funds that are channeled through Washington.

Long asked about the merits of a tax credit as opposed to a payroll tax. Dr. Roth said the tax credit is the most equitable in that it relies on the federal income tax which provides an accurate gauge of family income. The money retained by the individual for health insurance does not "have to make the round trip to Washington."

* * * *

First witness before the Senate Finance Committee hearing was Health, Education, Welfare Secretary Casper Weinberger who urged that a NHI bill "should be the highest priority item in the closing months of this Congress". He expressed hope that the areas of disagreement between competing NHI proposals would not be found insurmountable.

The Secretary, however, criticized all of the competing proposals, but with special attention to the Mills-Kennedy and the Health Security bill of organized labor. "Both vest too much power with the federal government," Weinberger said.

At the sometimes stormy meeting, Senator Vance Hartke (D.-Ind.) and Senator Clifford Hansen (R.-Wyo.) chided the Secretary for criti-

cizing the AMA plan, pointing out that Mediredit had powerful backing.

Sen. Hansen said that when negotiating time arrives there should be strong consideration of the Mediredit bill which has 182 sponsors, including five members of the Finance Committee and 11 members of the House Ways and Means Committee.

Hansen said the Council of Economic Advisors, and the Brookings Institute have recommended the tax credit method of financing employed by Mediredit should be used in broad federal programs. Weinberger said he preferred tax credits to a Social Security payroll tax, but thought general revenue financing was best. Hansen said controls could impede productivity and cause personnel to leave the health system.

Sen. Hartke said Mediredit has more sponsors than all other NHI bills combined. Weinberger said he would keep that in mind while conferring with Congress. "You are going to have to deal with 182 of us somewhere along the line," Hartke said. "Not just 'President' Kennedy or 'President' Mills."

Hartke said that despite Weinberger's criticism of Mediredit the fact is that all NHI bills basically deal with financing, including the Administration's plan which doesn't provide anything concrete about changing the system.

Sen. Abraham Ribicoff (D.-Conn.) said the Administration was being deceptive about the true costs of its program. He contended Weinberger is telling the American people they will have a \$55 billion "free lunch".

"You are dealing with the most complex social and economic program in the history of our nation," Ribicoff said. "If all sides can't agree to work out a compromise there will be no program."

Senator Long added that Americans must be given all of the facts about exactly what a NHI bill would cost them, pointing out that he couldn't "... see a free lunch in any of them."

* * * *

Meanwhile, on the House side the Ways and Means Committee completed the second month of one-day-a-week hearings on NHI.

It would appear that almost every health related organization in the country wishes to be heard. For example, one day's hearing saw the following organizations testify before the power-

ful House Committee: Blue Cross Association, National Medical Association, American Osteopathic Society, National Council of Health Services, American Podiatry Association, National Council of Community Health Centers, Veterans of Foreign Wars, and Americans for Democratic Action.

Some sparks flew when Andrew Biemiller, director of the AFL-CIO's Department of Legislation, appeared in place of AFL-CIO President George Meany. Biemiller in effect took an all-or-nothing approach, insisting that unless a bill similar to the original Kennedy-Griffiths measure is approved it would be better to wait until next year.

Of major interest to most Capitol Hill watchers is the fact that House Ways and Means Committee Chairman Wilbur Mills (D.-Ark.), cosponsor of the Kennedy-Mills proposal, attended the first hearing, but has missed all the rest.

* * * *

Labor's stand drew criticism from committee members, some of whom stressed a theme that there is strong pressure for Congress to act this year especially on a catastrophic bill.

Biemiller said "if Mills-Kennedy is this committee's idea of a compromise, then I must say, in all candor, we will oppose it." Labor's strongest criticism came on the Long-Ribicoff bill. "It is not national health insurance, and does not pretend to be. It would be therefore a catastrophe if the Congress enacted catastrophic insurance," said Biemiller.

Rep. Omar Burleson (D.-Texas) told Biemiller that "you are not really willing to compromise at all." He said labor expects a Congress of a "different nature" next year so that it can get all that it wants.

Biemiller replied that the elections of 1964 changed a lot of minds in Congress about Medicare and resulted in its passage in 1965.

Congressional backers of the Mediredit national health insurance plan rallied on the floor of the House of Representatives in early May to praise the NHI approach developed by the AMA.

A score of speakers rose to urge congressmen and senators to join them in backing Mediredit, which has more sponsors — 182 — than all other NHI proposals combined.

"One reason why the legislation has such support in the Congress is because it is based on some solid principles that are both realistic and workable," declared Rep. Omar Burleson (D.-Texas).

Rep. Richard Fulton (D.-Tenn.), principal cosponsor and like Burleson a member of the key House Ways and Means committee, told the House that "Mediredit's benefits are comprehensive; its ability to meet our present needs seem unarguable; its price tag in terms of new tax dollars seems to be within the nation's means, and the method it proposes for financing the plan appears to me to rest fairly on the taxpayer without overburdening our Social Security system."

Rep. Joel Broyhill (R.-Va.), chief GOP sponsor and a high-ranking member of the Ways and Means panel, said 182 members of Congress "have seen through the fog of rhetoric and printed word swirling about national health insurance. They have chosen Mediredit. I invite more of you to come aboard in support of a sensible piece of legislation."

Broyhill said Mediredit enjoys two prime virtues — free choice of health care setting and physician, and "the American philosophy of voluntarism."

Rep. Tim Lee Carter, M.D., a Kentucky Republican, said no other NHI proposal offers as liberal a psychiatric benefit as Mediredit.

The American Psychiatric Association had pointed out that Mediredit stands alone in this regard. "All other NHI proposals contain some discrimination that separates treatment of the mentally ill from that of the physically ill," noted Dr. Carter.

"Mediredit is a workable approach. The medical profession and the public want a plan that keeps the federal government's role at a minimum. From the standpoint of benefits, efficiency, financing and acceptability, I am convinced that the Mediredit approach is by far the best we have before us," Carter said.

Rep. Jerry Pettis (R.-Calif.), a member of Ways and Means, said his colleagues should consider foreign national health systems:

He cited such cases as:

- In Sweden the per capita health care costs increased by 614 per cent from 1950 to 1966 compared to 174 per cent in the United States. Since

1960 medical costs in Sweden have increased almost 900 per cent.

- In West Germany there is a serious maldistribution of medical personnel.

- Norway reports a shortage of practitioners.

- Hospital rates in Canada are higher and length of stay longer than in the U. S.

Pettis said we had better be very careful about tinkering with our present system. "Certainly there is clear warning in these facts to all of us that we should not abandon the strengths of the American system for the type of health delivery system which has been developed in some other country."

Rep. Peter Kyros (D.-Maine) said Medigap "goes right to the heart of the catastrophic problem." "No matter how large or small a family's income, its medical expenses would never exceed 10 per cent of that income," said Kyros. "This would be a tremendous reassurance to every family. At the same time, it offers a fair method — a sliding scale — for sharing the country's major health costs."

Rep. Robert Michel (R.-Ill.) said Medigap "meets the true test of any workable national health insurance plan — it provides access to high quality medical care to all Americans on the basis of sharing the cost in an equitable fashion. The poor would pay nothing. In a fair way, the better-off would pay on a sliding scale that reflected their income."

"Most importantly, this legislation would insure that no American would have to go bankrupt because of a catastrophic illness," said Michel.

* * * *

The Professional Standards Review Organization (PSRO) program is off to "an incredibly bad start" and encountering increasing physician resistance, the American Medical Association has told Congress.

AMA President Russell Roth, M.D., testifying before the Senate Finance subcommittee on health, said 13 state medical societies have formally declared for repeal of the PSRO law and that 29 societies support a policy of amendment and/or repeal. (As of May 7, 1974.)

"We cannot be precise in numbers, but it seems evident that, as understanding of the PSRO law spreads, the resistance to it grows," said Dr. Roth.

The health subcommittee, chaired by Sen. Eugene Talmadge (D.-Ga.), slated two days of hearings on the spreading controversy over the PSRO law.

Dr. Roth said "the best efforts of the legislators involved, the staff of the Senate Finance Committee, the staff of the PSRO administrative office in HEW, and physicians from AMA, from assorted state medical societies and specialty medical organizations, have not succeeded in creating in the profession the climate of acceptance and cooperation essential to success. The fault does not lie with the sincerity or intensity of the effort to cooperate, it lies with the basic ineptitudes of the statute."

The AMA president said it has been seriously proposed that because of the bad start on PSRO it may be best to fall back, regroup, and start over again. The official AMA position, he noted, is that repeal may need to be considered if amendatory patchwork is unacceptable.

Robert Hunter, M.D., chairman of the AMA special advisory committee on PSRO and a member of the AMA board of trustees, described to the senators the AMA's extensive "constructive efforts" to cooperate with congress and the government to make PSRO work.

Edgar T. Beddingfield, Jr., M.D., vice chairman of the AMA's council on legislation, said "the PSRO law has created a great deal of confusion and misunderstanding."

Sections on norms of health care services are patently contradictory and we would anticipate that the net result would be that the norms of care would be viewed as rigid federal minimum requirements, Dr. Beddingfield said. "Patients and the profession alike are legitimately concerned with the prospect of cookbook medicine." He recommended that the "norms" should be guides for care and should be clearly understood to be initial points of evaluation and review. Furthermore, Dr. Beddingfield said, such guides must not be substituted for the medical judgment of individual physicians in the delivery of health care services.

During the two days of hearings, some 20 medical associations, state societies, and specialty groups testified their general misgivings with respect to the workability of the statute. Throughout the hearings Senator Wallace Bennett (R.-Utah) stoutly defended PSRO — "I won't

live long enough to see repeal of PSRO" — against, at times, shouting and hostile witnesses.

* * * *

AUDIO-TAPE TEACHING PACKAGES

Audio-Tape Teaching Packages from the post-graduate education programs of the University of Missouri-Kansas City School of Medicine are available through the Academy of Health Professions in Kansas City, Missouri.

The packages include a cassette tape summary prepared by J. H. Morris, Jr., M.D., Director of Medical Education, and reinforcement reference materials.

Programs currently available are: Hypertension and Renal Disease; Infectious Diseases and Pulmonary Disease; Immunology and Hematology; Current Trends in Cardiology and the Generalist's Cardiac Evaluation; Cardiology; Management of Blood Problems in Daily Practice; and the Heart of 1973—Current Topics in Cardiology.

For further information on orders write: The Academy of Health Professions, 2220 Holmes Street, Kansas City, Missouri 64108. The cost is \$10.00 per package.



PERSONAL AND NEWS ITEMS

New Caduceus Club President

Dr. Asa Crow of Paragould was installed recently as president of the Caduceus Club of the University of Arkansas School of Medicine alumni, succeeding Dr. Neil Crow of Fort Smith.

Dr. Fowler Named to Hospital Board

Dr. Ross Fowler of Harrison has been named to the Board of the Boone County Hospital for a seven-year term. Dr. Fowler is the first physician to serve on the hospital board since it was established in 1950.

Arkansas Native and Graduate Elected

The Missouri Medical Association has elected Dr. R. A. Chandler, now practicing in Kansas City, as its president-elect for 1975-76. Dr. Chandler is a native of Jonesboro, Arkansas, and a 1953 graduate of the University of Arkansas School of Medicine.

Physicians Honored

Dr. Joseph D. Calhoun of Little Rock and Dr. Thomas H. Wortham of Jacksonville received distinguished service awards in recognition of their service as volunteer faculty members at the University of Arkansas School of Medicine.

Dr. Rogers Named to Board

Dr. Henry Rogers of Mena has been appointed to serve on the Polk County Memorial Hospital

Board of Governors for a seven-year term. Dr. Rogers succeeds Dr. Pierre Redman of Mena.

Dr. Stephens Relocates

Dr. Maurice L. Stephens, formerly a member of the Clarksville Medical Group in Clarksville, Arkansas, has announced his association in the general practice of medicine with Drs. Calvin Austin and Doty Murphy in Mena.

Dr. Barnett Retires

Dr. James Claude Barnett has announced his retirement from the active practice of medicine after three decades of continuous service as a physician and surgeon in Heber Springs.

State Physicians/Authors Published

A paper entitled "Failure of Chemotherapy in Treatment of Giant Condyloma Acuminata (Buschke-Loewenstein Tumor)" by Dr. John F. Redman of Little Rock and Dr. Jan T. Turley of Fayetteville was published in the June 1974 issue of the Southern Medical Journal.

Physicians Locate

Dr. G. W. Dickinson has recently entered practice with his nephews, Drs. R. B. Dickinson and Rodger Dickinson, at the Dickinson Clinic, 302 North Fourth in DeQueen. For the past twenty-one years, Dr. Dickinson practiced in Palmyra, New Jersey.

The Millard-Henry Clinic of Russellville has announced that Dr. E. Jane Mauch, a native of Sapulpa, Oklahoma, is now associated with the clinic as a doctor in family practice with emphasis in office gynecology and pediatrics.

Dr. Edith Brown has become associated with the Newton County Medical Center in Jasper. Dr. Brown, a native of Conneaut Lake, Pennsylvania, has been practicing in Tucson, Arizona. Dr. Brown joins the staff there with Dr. William A. Hudson.

Drs. Paul L. Rogers, Thomas G. Parker, and William T. Huskison have announced that Dr. William Culp, a native of Galveston, Texas, is now associated with them at Radiologists, P.A., 318 North Greenwood in Fort Smith. Dr. Culp had been in contact with the Physician Placement Service of the Arkansas Medical Society.

"Doc Hudson" Subject of Article

Dr. William A. Hudson, until recently the only physician in Jasper, was the subject of an article appearing in the Tulsa World newspaper. The article highlighted Dr. Hudson's career and daily workload as the only physician in a rural mountain county in Arkansas.

Local Blood Crisis Group Named

Dr. Donald Kreutzer of Harrison is the physician member of a committee which recently called for the formation of a non-profit corporation to be called Northwest Arkansas Blood Services, Inc. The basic purpose of the corporation is to develop a list of blood donors on a continuing basis and to educate the area public of the immediate need for blood services.

Physician Relocates

Dr. Joseph V. LeBlanc, formerly associated with the Cooper Clinic in Fort Smith, has moved to Bartlesville, Oklahoma. Dr. LeBlanc will be with the medical department of Phillips Petroleum Company in Bartlesville.

Dr. Westbrook Receives Fellowship

Dr. Kent C. Westbrook, assistant professor of surgery at the University of Arkansas Medical Center, has received a three-year faculty clinical fellowship. It was announced by Dr. John Broadwater, Fort Smith, president of the American Cancer Society, Arkansas Division. Dr. Westbrook's fellowship will be served under Dr. Gilbert S. Campbell, professor and chairman of surgery at the Medical Center.

Dr. H. G. Hearnberger, Jr., Selected

Dr. Henry G. Hearnberger, Jr., of Little Rock, has been elected to the Board of Directors of First Bank Financial Services, Incorporated. Dr. Hearnberger is Director of the Greater Little Rock Comprehensive Community Mental Health Center.

National Health Service Corps

The National Health Service Corps has recently assigned two physicians to communities in Arkansas for two years of service. Dr. Craig E. Ditsch will locate in Lewisville in Lafayette County. Dr. Ken Davis will locate in Marianna in Lee County.

Dr. Ashcraft Opens New Clinic

Dr. Ted E. Ashcraft has announced the opening of the Ashcraft Medical Clinic at 2524 West Main in Russellville. Dr. Sandra Young will be associated with Dr. Ashcraft in family practice.

Physician Locates

Dr. Thomas A. Pullig, a native of McNeil, Arkansas, has joined the staff of the Ashdown Clinic, Ashdown, Arkansas. He is associated with Drs. James D. Armstrong and N. W. Peacock, Jr.

Dr. Lloyd Langston

Dr. Lloyd Langston has become associated with Dr. J. Wayne Buckley at the Ear, Nose, and Throat Clinic in Pine Bluff. Dr. Langston has relocated to Arkansas from the Naval Regional Medical Center in Oaklawn, California.

Dr. James Y. Massey

Dr. James Y. Massey, a native of Memphis, Tennessee, is now associated with Dr. John Sneed in the practice of Ophthalmology at 613 South Street in Mountain Home, Arkansas.



CORRECTION

Dr. M. J. Kilbury, Jr., was listed as being retired in the June 1974 issue of the Journal of the Arkansas Medical Society. Dr. M. J. Kilbury, Jr., is in active practice at 500 South University in Little Rock. Dr. M. J. Kilbury, Sr., has retired from active practice. The Journal apologizes for this incorrect listing.

THINGS



TO

COME

The University of Arkansas School of Medicine recently received notice from its accrediting agency that its medical education program has received full approval for the next seven years.

The accreditation report followed a site visit by representatives of the Liaison Committee on Medical Education, a joint committee of the Council on Medical Education of the American Medical Association and the Executive Council of the Association of American Medical Colleges.

Last surveyed and approved in 1967, the University of Arkansas Medical Center school was commended in the present report for substantial progress during the interim in various areas including curriculum changes, strengthening of faculty, and its goal of providing health manpower required to meet the needs of the state by creating a statewide health science university and medical school utilizing health education centers in major regions of the state.

Looking to the future, the liaison committee found that ambulatory care facilities at the Medical Center must be modernized and expanded if it is to meet its obligations and objectives.

The team also pointed out that plans for admitting additional students in the entering classes will require additional resources in terms of money, faculty and facilities.

Present plans call for letting bids this fall on a new educational building at the Medical Center, through funds provided by the 1973 legislature, to increase the entering medical school classes from the present 121 students to 170. The building also will house the medical library, which the re-accreditation report noted was in critical need of space in order to serve as a valuable resource in the institution's programs.

The report was addressed to the University president, with copies to Dean Winston K. Shorey and Vice President for Health Sciences James L. Dennis.

Gastrointestinal Disease and Rheumatology Workshop

The 1974 Long Weekend program, sponsored by the School of Medicine and the Division for Continuing Education of the University of Missouri-Kansas City, Kansas City Southwest Clinical Society, and the Academy of Health Professions, will cover the subjects of gastrointestinal disease and rheumatology. The meeting will be held September 27-28, 1974, at the Alameda Plaza Hotel in Kansas City, Missouri.

The Long Weekend programs are acceptable for 13 credit hours in Category 1 for the Physician's Recognition Award of the American Medical Association.

The workshop format stresses involvement and participation by case presentations, practical demonstrations, and in-depth discussions. The "how" of disease management is to be emphasized.

These postgraduate sessions are limited to 40 physicians and spouses. For program and registration information, contact: The Long Weekend, University of Missouri-Kansas City School of Medicine, 2220 Holmes Street, Kansas City, Missouri 64108. Telephone Area Code 816-471-3876.

Arkansas-Oklahoma Cancer Forum

The Arkansas Division of the American Cancer Society is sponsoring the Arkansas-Oklahoma Cancer Forum to be held at the Sheraton Inn in Fort Smith, September 26-27, 1974. Several speakers from M. D. Anderson Hospital in Houston, Texas, will be featured during the forum.

For registration information, write: American Cancer Society, Arkansas Division, Inc., Post Office Box 3822, 1429 West Seventh Street, Little Rock, Arkansas 72203. Or call: Area Code 501-376-0551.





NEW MEMBERS

Dr. Paul H. Wilson

The Union County Medical Society has accepted for membership Dr. Paul H. Wilson, a native of Camden, Arkansas.

In 1962, Dr. Wilson received his B.S. degree from Henderson State Teachers College in Arkadelphia, Arkansas. He was graduated from the University of Arkansas School of Medicine in 1966. Dr. Wilson completed his internship at the University of Arkansas Medical Center as well as his Ophthalmology residency. He served in the United States Navy from 1967 through 1970.

Dr. Wilson now practices Ophthalmology at 514 West Faulkner in El Dorado.

Dr. William George Irwin

Dr. William G. Irwin has been added to the membership roll of the Garland County Medical Society. He is a native of Columbus, Indiana.

Dr. Irwin received his A.B. degree from Indiana University at Bloomington in 1963. He was graduated from the Indiana University School of Medicine, Indianapolis, in 1967. He interned at Marion County General Hospital in Indianapolis in 1967. His residency work was completed at the Medical College of Georgia, Augusta, in 1971. Dr. Irwin served in the United States Army from 1971 until 1973 and he held a teaching appointment as instructor in Dermatology at the Medical College of Georgia during those two years.

He is a member of the Arkansas Dermatological Society and is Board Certified by the American Board of Dermatology. Dr. Irwin is associated with Dr. D. B. Stough, III, at Doctors' Park in Hot Springs.

Dr. Lawrence W. Sanders

The Garland County Medical Society has added the name of Dr. Lawrence W. Sanders to its membership roll. He is a native of Hot Springs.

Dr. Sanders received his B.S. degree from the United States Military Academy at West Point, New York, in 1962. He was graduated from the University of Colorado School of Medicine in Denver in 1966. He completed a rotating internship at Wilford Hall, United States Air Force Medical Center, San Antonio, Texas. He began his service in the United States Air Force in 1968 and completed his obligation in 1973. During that period he completed a general Internal Medicine residency at Wilford Hall in 1970. From 1970 until 1972, he served as the Chief of Internal Medicine Service at the United States Air Force Hospital, Ankara, Turkey. From 1972 until 1973, Dr. Sanders was at the Internal Medicine and Rheumatology Clinic at Malcolm General Hospital, Andrews Air Force Base, Maryland. He is Board Certified in Internal Medicine.

Dr. Sanders is associated with the Burton-Eisele Clinic at 101 Whittington, Hot Springs, practicing Internal Medicine.

Dr. Hallman E. Sanders

Dr. Hallman E. Sanders has been accepted for membership in the Garland County Medical Society. He is a native of Hot Springs.

Dr. Sanders attended the University of Arkansas at Fayetteville and was graduated from the University of Arkansas School of Medicine in 1936. He completed his internship at St. Mary's Group of Hospitals in St. Louis, Missouri. He served in the United States Army and the United States Air Force from 1937 until 1965. Following his military service, Dr. Sanders held positions with the Colorado Health Department, the Federal Administration, and the United States Postal Service.

Dr. Sanders is now a staff physician at the Hot Springs Rehabilitation Center on Reserve Avenue in Hot Springs.

Dr. James Sterling Adamson

The Pulaski County Medical Society has accepted for membership Dr. James S. Adamson, a native of Little Rock.

Dr. Adamson received his B.A. degree from Harvard University, Cambridge, Massachusetts, in 1957. He was graduated from the University of Arkansas School of Medicine in 1961. His internship was completed at the University of Arkansas Medical Center. Dr. Adamson received residency training in Pathology at Duke University, Durham, North Carolina, and the University of Arkansas Medical Center. His resi-

dency work in Internal Medicine was completed at the University of Arkansas Medical Center in 1966. Dr. Adamson serves as an Associate Professor of Medicine at the University of Arkansas School of Medicine. He is Board Certified by the American Board of Internal Medicine. Dr. Adamson is a member of the American Thoracic Society and a Fellow in the College of Chest Surgeons.

He is currently practicing Internal Medicine at 900 North University in Little Rock.

Dr. Thomas Ross Ahrend

Dr. Thomas R. Ahrend has been added to the membership roll of the Washington County Medical Society. He is a native of Ada, Oklahoma.

Dr. Ahrend received his B.S. degree from East Central State College in Ada, Oklahoma. He was graduated from the University of Oklahoma School of Medicine, Oklahoma City, in 1966. His internship was completed at the University of Oklahoma hospitals in 1967 and he completed his residency work in General Surgery at the University of Arkansas Medical Center in Little Rock in 1971. Dr. Ahrend was Staff Surgeon at Portsmouth Naval Hospital, Virginia, while in the United States Navy from 1971-1973. He held a Transplant Surgery Fellowship at the Medical College of Virginia, Richmond, from July 1973 until January 1974. Dr. Ahrend is Board Certified in General Surgery.

He is associated with Drs. J. Warren Murry and Jack A. Wood in the practice of General Surgery at 1749 North College in Fayetteville.

Dr. James Larry Bone

The Sebastian County Medical Society has added the name of Dr. James L. Bone to its membership roster. He is a native of Searcy, Arkansas.

Dr. Bone received his B.A. degree in 1964 from Hendrix College in Conway, Arkansas. He was graduated from the University of Arkansas School of Medicine in 1967. His internship was completed at Parkland Memorial Hospital in Dallas, Texas, in 1968. From 1968-70 he was General Medical Officer in the United States Air Force at Lackland Air Force Base, San Antonio, Texas. Dr. Bone's residency work in Ophthalmology was completed at Parkland Memorial Hospital in 1974.

Dr. Bone is practicing Ophthalmology, associated with the Holt-Krock Clinic in Fort Smith.

Dr. Stephen Bryan Tilley

Dr. Stephen B. Tilley has been accepted for membership in the Pulaski County Medical Society. He is a native of Harrison, Arkansas.

Dr. Tilley attended Henderson State Teachers College in Arkadelphia, Arkansas, and was graduated from the University of Arkansas School of Medicine in 1972. His internship at Saint Vincent Infirmary was completed in 1973. He completed a Family Practice residency at the University of Arkansas Medical Center and Saint Vincent Infirmary in 1974.

Dr. Tilley is practicing Family Medicine associated with Dr. John Stotts at 5905 "R" Street in Little Rock.

Dr. Jyi-Ming Tseng

The Pulaski County Medical Society has accepted for membership Dr. Jyi-Ming Tseng. Dr. Tseng is a native of Taiwan, China.

Dr. Tseng was graduated from Koahsiung Medical College, Taiwan, China, in 1969. His internship was completed at Cook County Hospital, Chicago, Illinois, in 1972. He completed his Anesthesiology residency at Lloyd Noland Hospital, Fairfield, Alabama, in 1974. He is a member of the American Society of Anesthesiologists.

Dr. Tseng is an Anesthesiologist at the Baptist Medical Center in Little Rock.

Dr. Edward T. Jones

The Independence County Medical Society has accepted for membership Dr. Edward T. Jones, a native of Lima, Ohio.

Dr. Jones attended Kansas State College and received his B.S. degree from the University of Minnesota at Minneapolis in 1938. He was graduated from the University of Minnesota Medical School in Minneapolis in 1942. Dr. Jones completed his internship at Trinity Hospital, Minot, North Dakota. He completed residency work at the Illinois Eye and Ear Infirmary, University of Illinois at Chicago. From 1950 until 1973, Dr. Jones was in private practice in Beloit, Wisconsin. During that period (from 1951 until 1958) he served as a Clinical Instructor at the University of Illinois. Dr. Jones is Board Certified by the American Board of Ophthalmology and is a member of the American Academy of Ophthalmology and Otolaryngology.

He is practicing Ophthalmology at 180 North 5th Street in Batesville.

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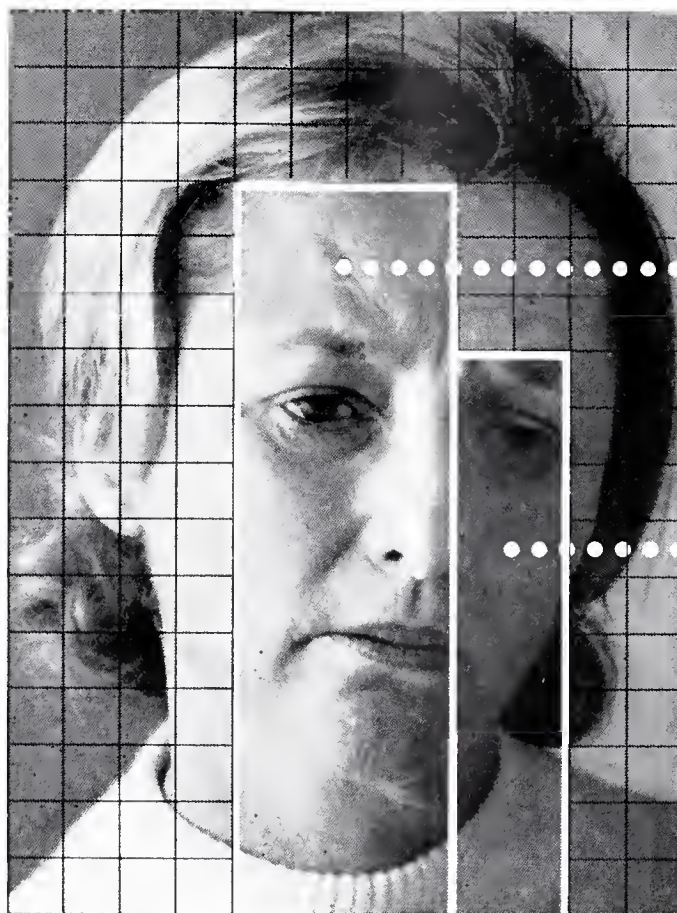
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For further information on this subject, the following references are provided:

1. Henry BW, *et al*: *Dis Nerv Syst* 30:675-679, Oct 1969.
2. Hollister LE, *et al*: *Arch Gen Psychiatry* 24:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970.



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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 71, No. 4. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

Diagnostic Factors in Breast Cancer

Laman A. Gray, M.D.*

The primary responsibility for the detection of early breast cancer lies with the practicing physician. Every woman patient above 35 years of age should have examination of the breasts each six months with or without symptoms. Day,⁶ in 1963, and Gilbertsen,⁷ in 1969, demonstrated that some 70 per cent of breast cancers can be detected in a relatively early stage by careful physical examination. According to Haagensen,¹⁰ the diagnosis in the very early state should allow a cure rate of some 80 per cent of women with the disease.

Between examinations by the physician, women are urged to examine their own breasts, both by inspection and palpation. Commonly the patient has accidentally felt the breast lump which has brought her to the physician. On occasion she has observed the lump for months because it was painless and because of the natural desire to avoid the thought of such a disease. Routine self-examination of the breasts, as advised by the American Cancer Society and many physicians interested in this field, may not have uncovered many cases of early breast cancer, but it is an effort to discover early lesions. Certain aspects of breast diseases which relate to the diagnosis of breast cancer are summarized here. These include fibrocystic disease, macrocysts and hormonal effects.

I. Fibrocystic Disease.

The problem of the fibrocystic disease is its differentiation from carcinoma. The incidence of this condition is said to vary from 4.5 to 90 per cent (Spratt, 1967).¹⁷ In our experience at least slight degrees of thickening of the breast are present in 90 per cent of women. Relatively rarely is a completely soft breast palpated. Rubbery, irregular nodularities nearly always tender, vary in size and symptoms with observation. Pain usually is a presenting symptom, along with

concern of cancer. Because carcinoma may be present in the breast with fibrocystic disease, biopsy must be performed in the doubtful case.

Psychologic variations include premenstrual engorgement, premenstrual nodularity and pain. Exacerbations preceding and regressions following the menses were not designated chronic cystic mastitis by Haagensen,¹⁰ but most gynecologists consider those cyclic changes in that category. The cause of the condition evidently is hormonal. It may remain marked for a few months, only to regress thereafter.

In a pathologic review of 274 benign biopsy specimens performed because of thickened areas in the breasts, chronic cystic mastitis or fibrocystic disease was considered the explanation. Various microscopic forms were present. Extremely dense hyalinization or sclerosis of interlobular connective tissue was found in 130 cases. These areas vary little or none with the menstrual cycle and may persist after the menopause. Sclerosing adenosis was present in 87 cases; the intralobular connective tissue was more fibrotic and prominent and the cells in the ducts and acini often appeared hyperactive. Intracanalicular fibroadenomas were found in 66 cases, while hyperactive epithelium alone was the principal characteristic in 47, chronic inflammation in 16, intraduct papillomatosis in 13, florid adenomas in two and florid adenosis in seven. In certain instances the clinically thickened tissues appeared normal microscopically. No single microscopic pattern explained clinical thickenings in the breast.

Exacerbation of chronic mastitis in the premenstrual phase of the cycle suggests not only a relation to estrogenic hormone but that progesterone is an important factor. Earlier opinions in the literature that a deficiency in progesterone may be the principal cause of mastitis seems less likely than a causal relationship to normal, or even excess, progesterone in a breast

*Clinical Professor of Obstetrics and Gynecology, University of Louisville School of Medicine, Louisville, Kentucky.

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primed with estrogen and sensitive to these hormones. A complete study of serial biopsies of human breasts is lacking.

In our experience fibrocystic disease became exacerbated in only 5.1 per cent of 1,221 patients who received estrogenic therapy in the menopause. This suggested that estrogen alone uncommonly stimulates clinical forms of mastitis.⁹

Tender painful nodularities, when strongly likely to be benign, are treated by reassurance. Proper breast support may help. Questionable areas should have biopsy, and prolonged thickening in an area merits excision. The menopause ordinarily brings complete regression. Oophorectomy, when hysterectomy is necessary, may be followed by disappearance of nodularities. Estrogens in small doses may not cause reappearance. Testosterone (as depo-testosterone 50 mgs. at midcycle) commonly gives relief; however, the slight hirsutism or fear of virilism promotes infrequent use of this hormone. Androgens are found normally in the female; further studies in symptomatic women may clarify a possible relationship.

II. Macrocysts of the Breast.

Bloodgood (1921,¹ 1929²) wrote extensively on chronic cystic mastitis and particularly the blue-domed cyst. He concluded that the macrocyst had no etiologic relation to breast cancer. In over 500 cases with macrocysts, a malignant growth was found in only five. In each, the malignancy was palpated separately from the cysts. The incidence of malignancy in these women appeared the same as in those operated on for lesions outside their breasts or other types of benign breast lesions. Copeland (1963),⁵ in 445 patients with macrocystic disease followed for 5 years or more, found five cases (1 per cent) who eventually developed carcinoma. On the other hand, Haagensen (1971)¹⁰ stated that while macrocysts rarely become malignant, the patient harboring such cysts is four times as likely to develop breast carcinoma as in the general population.

The treatment of macrocysts of the breasts by aspiration has been advised sporadically in the literature. Bull (1899),¹² Abbe (1903),¹² Matthews (1916),¹² Patey and Nurick,¹² Johnston (1954)¹² and Olch (1959),¹⁵ reported good results in relatively small series of patients treated in this manner. In recent years, several authors have advocated aspiration. Recently

Rosemond (1973)¹⁶ reported that some 3,000 patients had aspiration of macrocysts in his clinic.

Certain surgeons continue to advise that all cysts should have excision, while others indicate that the first cyst should be excised and subsequent cysts have aspiration. Increasing numbers are aspirating macrocysts.

In our patients, 81 have had 255 aspirations. Their ages varied from 19 to 56 years. Sixty-nine were between 35 and 55 years, the largest number occurring between 41 and 45 years. Thirty-seven were aspirated on one occasion, 13 twice, eight 3 times, eight 4 times, two 5 times, and two 6 times. One patient had aspirations on 14 occasions and another 21 times over several years. The fluid from the cyst of one was bloody; cytologic studies revealed malignant cells. Induration remained in the wall of the cyst and excision revealed carcinoma. One other patient developed carcinoma in another portion of the breast 5 years after the aspiration of a cyst.

It is of interest that 48 of these patients were menstruating and had vaginal smears which indicated full estrogenic effects. Seventeen had had hysterectomy without removal of the ovaries; in each the vaginal smears indicated continuing estrogenic effect. In two with hysterectomy and oophorectomy, a full estrogenic effect continued in the vaginal smear. In 13 of the 81 patients estrogenic hormones were given in the menopause, with confirmed estrogenic vaginal smears. A single patient, age 55 years, had an atrophic vaginal smear, indicating a complete lack of estrogens at that time. One would assume that this cyst was present for some years and had developed from her premenopausal estrogens. It appears that estrogens alone produce macrocysts.

Certain rules relate to the aspiration of breast cysts. The tumors must be rounded and suggest the characteristics of a cyst. The cysts should be soft and fluctuant if aspirated by the gynecologist or usual physician. In case of a very firm cyst which may represent a solid tumor or malignancy, aspiration should be performed by the surgeon who will be prepared to carry out an operation for cancer. No induration or retraction of skin must be present. All cysts having grossly bloody fluid require biopsy. Cysts with suspicious cytologic findings should have biopsy, although interpretation of cells shed into cysts

over long periods may be difficult, for which reason many have given up cytologic studies of the clear yellow fluid. Finally, the patients should be instructed in breast self-examination and should have follow-up in 6 weeks to 3 months and at regular intervals thereafter.

From a review of the literature, from general pathologic considerations and from personal experience, the gynecologist should feel free to aspirate macrocysts if he follows the proper guideline. The discovery of the macrocyst is not uncommon in obstetric and gynecologic practice, especially since his patients have routine and regular examinations. The guidelines must be followed: they indicate which patient may have aspiration and which must have biopsy, as with the finding of bloody fluid or residual thickening or induration following aspiration. Again, a cooperative breast surgeon should be available. The pursuance of this philosophy and action may add great benefit to the patient and reasonable safety for her future, as regards the early diagnosis of carcinoma of the breast.

III. Oral Contraceptive Hormones and Breast Problems.

Oral hormonal contraceptives containing both estrogens and progestins in relatively high concentration, have been used by millions of women over the past 12 years. While a wide experience indicates that relatively few breast symptoms develop after these preparations, on occasion congestion is marked and nodularities are quite obvious; a few cases with galactorrhea have been reported. At least two cases of carcinoma of the breast, occurring during this type of therapy, have been described in the literature. Individual sensitivity of the breast to these hormones is quite variable, as indicated by the fact that constant dosages have been employed in large numbers of women.

In 1968, Goldenberg, Wiegenstein and Mottet⁸ described florid fibroadenomas of the breast in women who received combined hormonal preparations for contraception. These encapsulated tumors suggested well differentiated adenocarcinomas, but the regularity of the cells and the lack of any true invasion mitigated against such a diagnosis. Their cases were considered benign.

Biopsies of nodularities in 30 cases who have received contraceptive hormonal preparations in the past few years revealed fibrosing adenosis in 11 cases, of which four had very active appearing

glands. Intracanalicular fibroadenomas were found in nine, of which three had very active appearing epithelium. Fibrocystic changes, sclerosis, papillomatosis and hypertrophy occurred in one each. Florid fibroadenomas developed in two patients and florid adenosis in four. The florid changes in six patients were quite similar to those seen in three other patients who had never received any hormonal therapy. Our cases may not have severe enough findings to label them florid changes but certainly they represented hyperactivity.

From a relatively large number of women receiving oral contraceptive hormonal preparations observed by us over a decade, carcinoma of the breast has been discovered in two cases. These patients were older than the average, being 42 and 48 years of age. The clinical findings were characteristic of carcinoma when the patients were seen. The fact that these two patients were above 40 years of age may be significant. Actually the finding of nodularities in younger women on contraceptive hormonal preparations is uncommon and no real evidence indicates that cancer is produced in this manner (Taylor, 1971).¹⁸

IV. Estrogens and Cancer of the Breast.

For a half century a possible association with ovarian hormone and breast cancer has been postulated at not infrequent intervals. This followed the early work of Loeb (1919),¹³ when he demonstrated that oophorectomy in mice highly susceptible to breast cancer was followed by a reduced incidence of this disease. While sporadic case reports of breast cancer have appeared in the literature in women receiving estrogens, other reports have even suggested the lessened occurrence of breast cancer in women receiving hormones of this type.

In our experience 29 patients have been discovered to have cancer of the breast from a group of 1,500 women receiving oral conjugated estrogens over a period of 6 months to 25 years on a daily basis. The average period of time was 6.8 years. This raw data, now being analyzed epidemiologically, seems to indicate no increased incidence of carcinoma of the breast in these women. Byrd and Burch³ have corroborated these findings in their series of 800 patients receiving estrogens over long periods; 12 developed breast cancer, which appeared to be fewer than expected statistically.

An additional ten patients in our series of 1,500 women did develop cancer of the breast after having received oral estrogenic therapy from 1½ to 12 years earlier. Another five patients had received estrogenic vaginal cream once weekly for 1 month to 14 years and subsequently developed cancer of the breast. Finally three more patients had used estrogenic vaginal cream 2, 2, and 8 years earlier. These 18 cases appear remote in hormonal relationship, but are included for completeness. All of these patients are from a gynecologic practice in an upper socio-economic group, said to be high-risk and where hormones have been widely used.

The warning by Hertz¹¹ a few years ago that cancerogenic effects of estrogens on genital tissues may appear 10 to 20 years following administration has been strangely corroborated by the extraordinary development of vaginal and cervical adenocarcinoma in adolescents whose mothers had received a form of estrogenic substance (stilbestrol) during their pregnancy 10 to 20 years earlier. This appears to make Hertz more of a prophet than realized. Certainly it is evident from our data that estrogens are not necessarily present at the time breast cancer develops. Effects from past years are impossible to evaluate at this time.

V. Hormonal Evaluation of 100 Patients With Carcinoma of the Breast.

A review of 100 consecutive cases of carcinoma of the breast discovered in this practice revealed the average age to be 54.7 years. Vaginal cytology at the time the carcinoma was discovered indicated that 70 of these patients had a full estrogenic hormonal effect in the vagina, while 30 apparently did not. Of the 70 with estrogenic effect, 19 were menstruating, 15 were immediately menopausal but had estrogenic vaginal smears without hormonal therapy, and 36 were receiving hormone. Of these 36, 29 were ingesting conjugated equine estrogens, five were using vaginal estrogenic creams and two were taking contraceptive hormonal preparations, which included both estrogens and progestins.

Of the 30 with apparently no estrogenic hormone, 18 were postmenopausal and had documented atrophic vaginal smears with no history of previous hormonal therapy. Ten other patients had atrophic vaginas, but no smear report was recorded. These latter ten patients had received hormonal preparations of some type 1½

to 18 years previously. Two patients were quite elderly and senile, had not had vaginal smears and had never received estrogenic hormone.

It would appear from this series that estrogens had been present at the time the cancer developed in over two-thirds of our patients. However, in this gynecologic practice, estrogenic hormone has been widely used. On the other hand, it is demonstrated that malignant tumors of the breast may develop after the menopause in the absence of any estrogenic hormone. It would appear from this material that estrogens cannot be implicated as a direct factor in the cause of breast carcinoma.

VI. Discussion.

A significant report by Montgomery, Bowers and Kittleberger (1961)¹⁴ advised an important role which the gynecologist and obstetrician should play in diagnosis and therapy of breast cancer. In their series of 3,608 patients, suspicious palpable areas were noted in 819, or one in every four to five patients. Self-examination revealed only 37 lesions of significance which required biopsy. Three cancers were detected by instructed patients. The management of the 819 suspicious lesions consisted of observation in 246, recommendations for biopsy in 573, and actual biopsy performed by the gynecologist in 415 patients. Cancer was found in 46 of these patients or one in nine of the biopsies performed. These authors noted that this represented a much higher number of biopsies by the gynecologist as compared with the general surgeon, where one in five breast biopsies revealed the presence of cancer. They suggested that hesitation in biopsy should be avoided.

It was their opinion that the gynecologist should biopsy questionable early lesions and that if he were properly trained should proceed with a cancer operation when indicated. They felt that biopsy to discover carcinoma in inconclusive cases was not harmful to their patients and that proper scheduling of a cancer operation could be performed in the next day or two. They believed that the general surgeon does not see breast cancer at an early stage and that physicians in general do not look with sufficient suspicion upon inconspicuous disturbances of the breast.

Mammography is advised for the patient with questionable areas in the breast; it is considered accurate in diagnosis in 85 per cent of cases and

may outline multifocal areas in the same breast and separate growths in the opposite breast. Xeroradiography appears as a refinement over mammography, but again this becomes a technical situation to be resolved by the radiologist. Thermography appears a questionable adjunct for early diagnosis at the moment.

The responsibility and decision for biopsy of thickened areas in the breast are forever present with the gynecologist, the internist and the general practitioner. For those who do not perform breast surgery for cancer, they must have available a cooperative, able, and interested surgical specialist. Nodular areas in the breast, observed over periods of time and not intensely indurated, may be excised by the gynecologist. No conclusive proof has been offered that estrogens induce breast cancer in the human. In the report on cancer in New York State,⁴ exclusive of New York City (1941-1960), the incidence rate appears not to have changed in any significant degree between 1941 and 1960. Despite the widespread use of oral estrogens in these years, the meager statistics available on incidence in cases receiving estrogens do not indicate an increase in the occurrence. Further studies on incidence rates in patients receiving estrogens are indicated, as are continuing in Louisville.

VII. Summary and Conclusions.

1. Fibrocystic diseases of the breast represent a multifaceted variation of changes in the interlobular and intralobular connective tissues and the epithelia in the ducts and glands. Clinical differentiation from cancer may be difficult. Frequent biopsies of apparently benign but truly thickened areas should reveal earlier lesions more frequently.

2. Macrocysts are best treated by aspiration. Certain guidelines are necessary and follow-up must be a careful routine. Clinical evidence suggests that estrogens alone are the principal cause of macrocysts.

3. Birth control hormonal preparations may produce clinical fibrocystic disease in a small percentage of patients. Any relationship to carcinoma is unproved.

4. Estrogenic therapy in the menopause does not appear related to breast cancer from a review of raw data. Twenty-nine cases appeared in 1,500 patients receiving oral conjugated equine estrogens.

5. In 100 cases with breast cancer, 76 had estrogens present at the time of discovery of the tumor, while 30 did not. Thus estrogens are not necessarily present with the finding of breast cancer. That estrogens may have had an effect 10 or 20 years earlier remains conjecture.

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Diagnosis and Management of Intrasrotal Diseases

Nabil K. Bissada, M.D.* and John F. Redman, M.D.*

Diseases involving the intrascrotal structures are a frequent cause of morbidity and even mortality. As an external organ, the scrotum can be readily inspected, palpated or transilluminated. However, the scrotum is often neglected in the course of the routine physical examination. Furthermore, failure to recognize the common intrascrotal disease conditions in many instances has resulted in delay in treatment and consequent loss of an organ (testis) or life.

These conditions may be conveniently classified according to their clinical presentation as either acute or non acute.

ACUTE SCROTUM

This implies acute painful intrascrotal swelling, sometimes accompanied by general manifestations. The common conditions presenting in this manner include acute epididymitis, torsion of the testis or torsion of the appendix testis or appendix epididymis, mumps orchitis, and strangulated inguinal hernia.

ACUTE EPIDIDYMITIS: Occurs mainly in adults. Pain and swelling occur rapidly and may be associated with fever. If seen early the epididymis is enlarged and tender. The normal testis is situated in front and demarcated by a distinct groove. However, after a short period the structures may become so swollen that the epididymis cannot be distinguished from the testis on palpation.

TESTICULAR TORSION: Is a true surgical emergency and occurs predominantly in childhood and adolescence. It also presents with acute testicular pain and swelling, and there may be a history of recurrent subacute attacks. If examined early, the testis is usually higher in location than usual, and the epididymis cannot be palpated in its usual posterior position. However, after a few hours the condition may be very difficult to differentiate from acute epididymitis or other causes of acute scrotum. Since any delay in treatment may lead to infarction of the testis, exploration is indicated whenever the clinical picture is in doubt.

TORSION OF THE HYDATID OF MOR-GAGNI: (Appendix testis and appendix epididymis), usually presents a similar clinical picture which is difficult to differentiate from testicular torsion.

MUMPS ORCHITIS: Usually occurs in adults and is almost always preceded by parotitis.

STRANGULATED INDIRECT INGUINAL HERNIA: May simulate torsion of an undescended testis. Vomiting and abdominal pain with torsion may be especially misleading. However, both conditions require urgent surgical exploration.

Occasionally, it is impossible for even the experienced observer to establish the exact diagnosis on clinical grounds alone. Since epididymitis is rare in patients under 16 years of age and torsion is common in this age group, it has been our policy to routinely explore patients less than 16 years of age with an acute scrotum.

MANAGEMENT: Management of acute epididymitis is conservative and consists of bed rest, antibiotics, analgesics, and antipyretics as required. The use of oxyphenbutazone (Tandearil) is a dose of 100 mg. orally four times daily for four days usually shortens the convalescence and reduces morbidity. The scrotum should be supported. This can be easily accomplished by the use of a folded bath towel between the patient's legs. When the patient is ambulated, a large athletic supporter with thin soft padding on the inside is most suited for this purpose. Local anesthesia by injecting 5-10 ml. of 1% zylocaine (without epinephrine) in the spermatic cord above the testis usually produces immediate relief of pain.

Testicular torsion is an operative emergency. The cord should be untwisted and if the testis is viable, it is fixed to the lateral scrotal wall. The contralateral side is usually fixed at the same time.

NON ACUTE SCROTUM (SCROTAL MASSES)

Common conditions that present as a mass in the scrotum are: testicular tumors, spermatocele, hydrocele, varicocele, and indirect inguinal hernia.

*Division of Urology, University of Arkansas Medical Center, Little Rock, Arkansas. Send correspondence to: Nabil K. Bissada, M.D., Assistant Professor, Division of Urology, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205.

TESTICULAR TUMORS: Although uncommon, testicular tumors are found most frequently in young men between 20 and 40 years of age, constituting one of the leading causes of cancer deaths in this age group. They also constitute the seventh most frequent neoplasm in children. With rare exceptions, testis tumors are malignant. They are usually present as a painless testicular swelling, although some tumors are associated with pain. It is important to palpate each testicle carefully during the course of any male examination. Early diagnosis of small (1.5 x 1.5 cm.) masses can be made in this manner (Fig. 1). Although only about 10% of these patients present with clinical picture of epididymitis, this diagnosis has frequently been made on the basis of testicular enlargement alone, with tragic delay in making the correct diagnosis. For this reason, the diagnosis of a testis tumor should be considered in any testicular enlargement, increased firmness or heaviness until proven otherwise. Epididymitis in a young adult that does not respond to medical treatment within ten days should be reevaluated. If on physical examination, the diagnosis remains in doubt, the recommended procedure is inguinal exploration. After the vascular pedicle is controlled, the testis is delivered and examined, and if this substanti-

ates the diagnosis, a high inguinal orchiectomy is done. Further management is based on the histological type and the stage of the tumor.

SPERMATOCELE AND HYDROCELE: are cystic swellings and can easily be identified by transillumination. A spermatocele is usually located above and posterior to the gonad and is sometimes interpreted by the patient to be a third testis. If small and asymptomatic, it may require no treatment.

Hydroceles are usually idiopathic. If small and the testis can be adequately palpated they may be left alone. However, large disfiguring hydroceles or very tense hydroceles which threaten testicular atrophy should be corrected surgically. In children, hydroceles may communicate with the peritoneal cavity and if the communication is large, a congenital hernia may result. This requires herniotomy.

VARICOCELE: Implies abnormal dilatation and tortuosity of the veins of the spermatic cord. About 99% are left sided and 1% are bilateral. Usually, it is asymptomatic but occasionally the patient may complain of pulling or dull pain in the groin and scrotum. The patient should be examined in the standing position where the dilated veins are readily palpable (sometimes described as a bag of worms). When symptoms are present careful examination is necessary to rule out hernia or epididymitis as the actual cause of pain. If symptoms are not controlled by a scrotal support, operative intervention by ligating the internal spermatic vein may be indicated. Occasionally varicoceles contribute to infertility in males.

INDIRECT INGUINAL HERNIA: May present as an inguinoscrotal swelling. It is usually reducible. If irreducible, it may present some difficulty in diagnosis, but in such cases bowel sounds may be present on auscultation and the mass may be tympanitic at certain points. Because of the risk of strangulation, herniorrhaphy is usually indicated.

THE EMPTY SCROTUM

The undescended testis may be conveniently included in this discussion. It should be differentiated from the migratory and the ectopic testes.

A migratory testis can usually be returned to the scrotum by downward compression over the inguinal canal. An ectopic testis can usually be

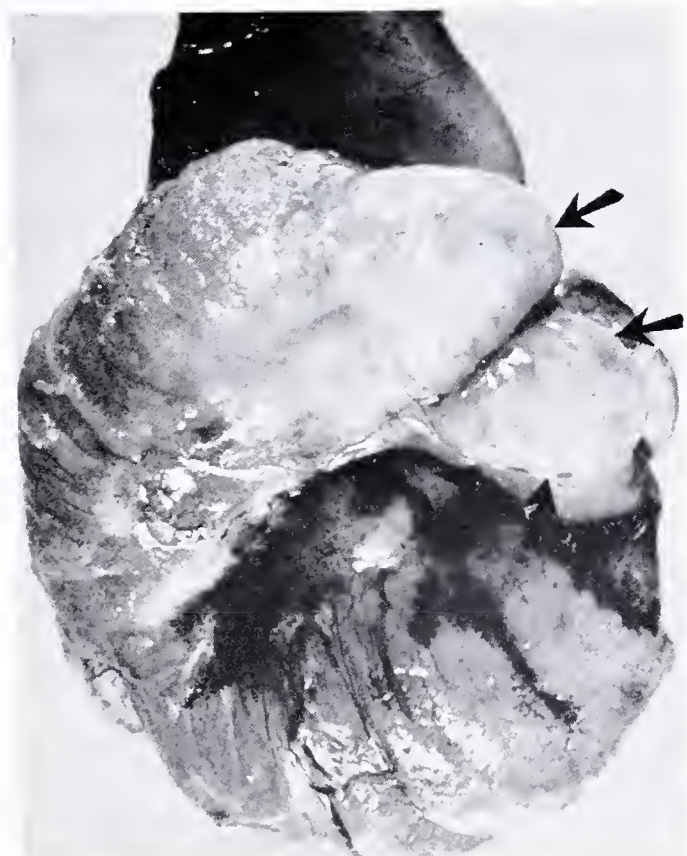


Figure 1: This small (1.5 x 1.5 cm.) testicular tumor (arrows) was detected on routine physical examination.

located by careful examination of the perineum, base of the penis, the inguinal and subinguinal regions. The incidence of complications are much higher in cryptorchidism than in the normal testis. Malignancy for instance is 30 times more frequent in the undescended testis as in the normally descended testis. It is also more subject to trauma, torsion and associated inguinal hernia. Treatment should be instituted about age five. If treatment is delayed much beyond that age, histological changes in the seminiferous tubules will occur with resultant sterility.

SUMMARY

The common intrascrotal diseases and their management were outlined. It is the responsibility of the practicing physician to include the scrotum in the routine physical examination, and to be familiar with the common intrascrotal diseases.

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Pro-Banthine reduces acidity without subsequent acid rebound. The capacity of Pro-Banthine to reduce the secretion of total and free acid in the stomach has been demonstrated in scores of studies. None has demonstrated any significant evidence of acid rebound.

Pro-Banthine activity lasts about six hours. The effect of a single therapeutic dose (15 mg.) of Pro-Banthine lasts about six hours.* Pro-Banthine P.A.®, the prolonged-acting form, is active from 8 to 12 hours. Thus Pro-Banthine may be used to suppress acid, spasm, and pain around the clock, even during the sleeping hours when antacids, to be effective, must be taken almost hourly.

*Innes, I.R., and Nickerson, M., in Goodman, L.S., and Gilman, A. (editors): The Pharmacological Basis of Therapeutics, ed. 4, New York, The Macmillan Company, 1970, p. 537.

Pro-Banthine complements and enhances the action of antacids.

SEARLE

Searle & Co.
San Juan, Puerto Rico 00936

Address medical inquiries to: G. D. Searle & Co.
Medical Department, Box 5110, Chicago, Ill. 60680

occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

Pro-Banthine P.A.—Each tablet of Pro-Banthine P.A. (propantheline bromide) contains 30 mg. of the drug in the form of sustained-release or

timed-release beads; on ingestion about half of the drug is released within an hour and the remainder continuously as earlier increments are metabolized. Thus the result is even, high-level anticholinergic activity maintained all day and all night in most patients with only two tablets daily. Some patients may require one tablet every eight hours.

The contraindications and precautions applicable to Pro-Banthine 15 mg. should be observed.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

The Role of the Detail Man

"I may be prejudiced, but I am very much in favor of the detail men I meet. Most of them are knowledgeable about the drugs they promote and can be a great help in acquainting me with new medication."

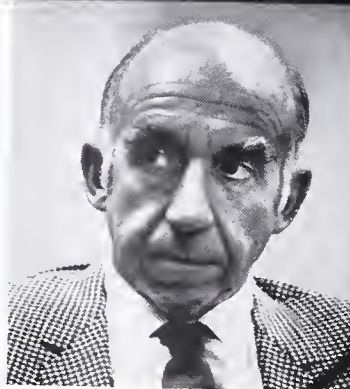
Family Physician's Perception

I think that most general practitioners in this area feel as I do about the detail man. Over the years I have gotten to know most of the men who visit me regularly and they in turn have become aware of my particular interests and the nature of my practice. They, therefore, limit their discussion as much as possible to the areas of interest to me. Since I usually see the same representative again in future visits, it is in his best interest to supply me with the most honest, factual, as well as up-to-date information about his products.

Dr. Willard Gobbell
Family Physician
Encino, California



Dr. Jeremiah Stamler
Chairman
Department of Community
Health and Preventive
Medicine, and Dingman
Professor of Cardiology
Northwestern University
Medical School



"In the total picture of dealing with health problems in this country, there is a potential for detail men to play a meaningful role."

The Positive Influence

My contact with representatives and salesmen of the pharmaceutical industry is the type of contact that people in a medical center, research people, and academic people have and that's in all likelihood on a somewhat different level from that of the practicing physician.

Let me touch on how I personally perceive the role of the sales representative. These men reach large numbers of health professionals. Thus they could be—and at times actually are—disseminators of useful information. They could consistently serve a real educational function in their ability to discuss their products.

At present they do distribute printed material, brochures and pamphlets—some of it scientifically sound and therefore truly useful—as well as some excellent films produced by the pharmaceutical industry. When they function in this

Opinion
&
Dialogue

Is He a Source of Information?

Yes, with certain reservations. The average sales representative has a great fund of information about the drug products he is responsible for. He is usually able to answer most questions fully and intelligently. He can also supply reprints of articles that contain a great deal of information. Here, too, I exercise some caution. I usually accept most of the statements and opinions that I find in the papers and studies which come from the larger teaching facilities. It goes without saying that a physician should also rely on other sources for his information on pharmacology.

Training of Sales Representatives

Ideally, a candidate for the position as a sales representative of a pharmaceutical company should be a graduate pharmacist who has a questioning mind. I don't think this is possible in every case, and so it becomes the responsibility

of the pharmaceutical company to train these individuals comprehensively. It is of very great importance that the detail man's knowledge of the product he represents be constantly reviewed as well as updated. This phase of the sales representative's education should be a major responsibility of the medical department of the pharmaceutical company.

I am certain that most of these companies take special care to give their detail men a great deal of information about the products they produce—information about indications, contraindications, side effects and precautions. Yet, although most of the detail men are well informed, some, unfortunately, are not. It might be helpful if sales representatives were reassessed every few years to determine whether or not they are able to fulfill their important function. Incidentally, I feel the same way about periodic assessments of everyone

in the health care field, whether they be general practitioners, surgeons or salesmen.

Value of Sampling

I personally am in favor of limited sampling. I do not use sampling in order to perform clinical testing of a drug. I feel that drug testing should rightly be left to the pharmacology researcher and to the large teaching institutions where such testing can be done in a controlled environment.

I do not use samples as a "starter dose" for my patients. I do, however, find samples of drugs to be of value in that they permit me to see what the particular medication looks like. I get to see the various forms of the particular medication at first hand, and if it is in a liquid form I take the time to taste it. In that way I am able to give my patients more complete information about the particular medications that I prescribe for them.

capacity they are indeed useful; particularly in the fact that they disseminate broadly based educational material and serve not just as "pushers" of their drugs.

The Other Side of the Coin

Obviously, the pharmaceutical companies are not producing all this material as a labor of love—they are in the business of selling products for profit. In this regard the ambitious and improperly motivated sales representative can exert a negative influence on the practicing physician, both by presenting a one-sided picture of his product, and by encouraging the practitioner to depend too heavily on drugs for his total therapy. In these ways, the salesman has often distorted objective reality and undermined his potential role as an educator.

The Industry Responsibility

Since the detail man must be an information resource as well as a representative of his particular pharmaceutical company, he should be carefully selected and

thoroughly trained. That training, perforce, must be an ongoing one. There must be a continuing battle within and with the pharmaceutical industry for high quality not only in the selection and training of its sales representatives, but also in the development of all of its promotional and educational material.

The industry must be ready to accept constructive as well as corrective criticism from experts in the field and consumer spokesmen, and be willing to accept independent peer review. The better educated and prepared the salesman is, the more medically accurate his materials, the better off the pharmaceutical industry, health professionals and the public—*i.e.*, the patients—will be.

Physician Responsibility

The practicing physician is in constant need of up-dated information on therapeutics, including drugs. He should and does make use of drug information and answers to specific questions supplied by the pharmaceutical representative. However, that informa-

tion must not be his main source of continuing education. The practitioner must keep up with what is current by making use of scientific journals, refresher courses, and information received at scientific meetings.

The practicing physician not only has the right, but has the responsibility to demand that the pharmaceutical company and its representatives supply a high level of valid and useful information. I feel certain that if such a high level is demanded by the physician as well as the public, this demand will be met by an alert and concerned pharmaceutical industry.

From my experience, my impression is that sectors of the pharmaceutical industry are indeed ethical. I challenge the industry as a whole to live up to that word in its finest sense.

Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005





ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

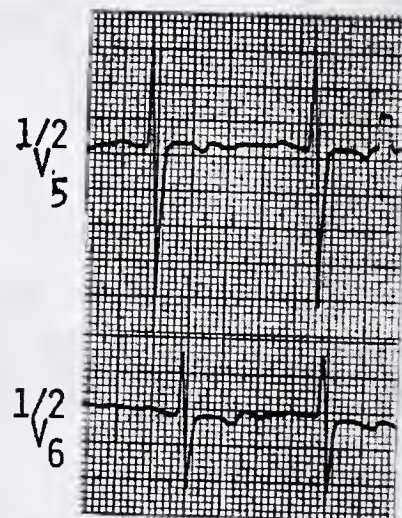
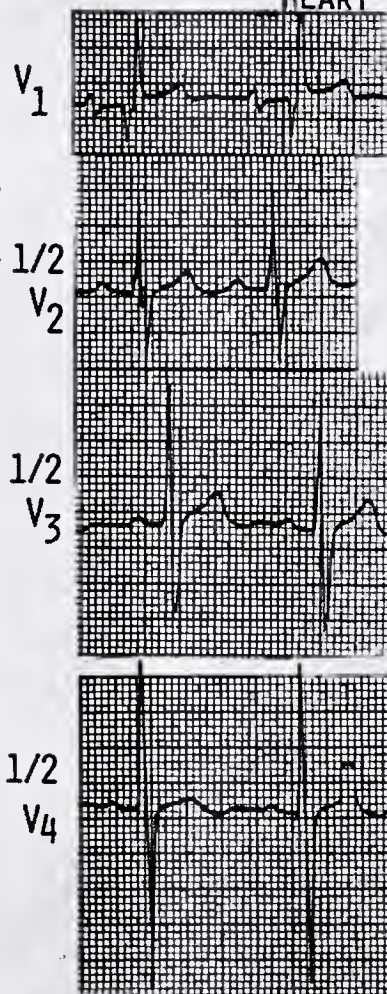
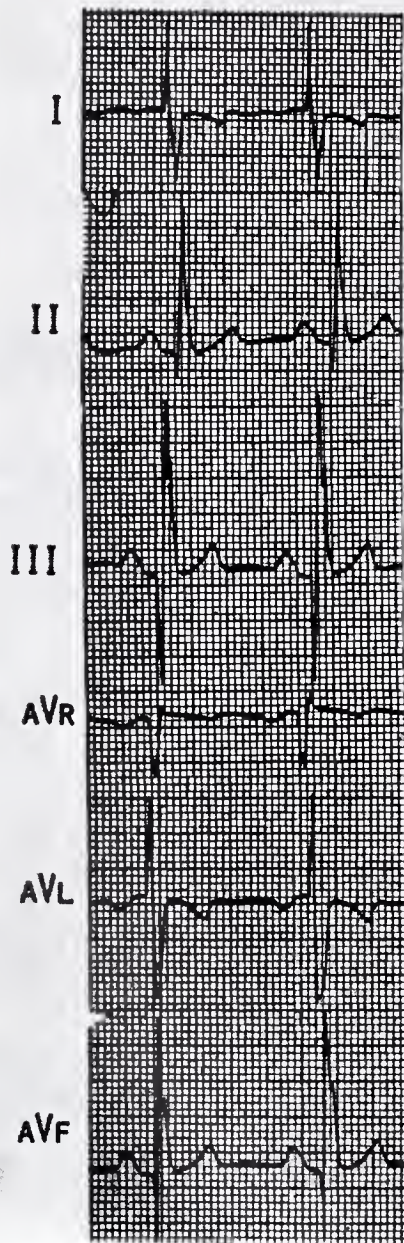
(See Answer on Page 167)

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AMC
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JULY 17, 1974

ECG OF THE MONTH

17 YR OLD WHITE MALE WITH CONGENITAL
HEART DISEASE



John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Beware of Poisonous Snakes

Harvie R. Ellis, D.V.M.

This is the time of the year when folks respond to the "call of the wild", lakes, camps, flower beds and other outdoor activities. During this time many people will encounter their first snake.

Of the 115 species of snakes in the United States, 19 are poisonous. Four major groups are: rattlesnakes, copperheads, water moccasins (cottonmouths) and coral snakes. The first three commonly are called "Pit Vipers". They have hollow fangs through which venom is injected into a wound, giving the appearance of punctures. The punctures resemble those made by a hypodermic needle and generally are two small holes about $\frac{1}{4}$ to $\frac{1}{2}$ inch apart.

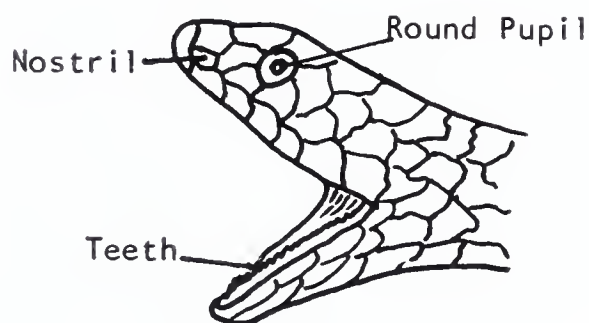
RATTLESNAKES, usually 15 inches to 8 feet long, have buttons or rattles at the end of their tails with which they give warning when they are disturbed. They prefer rocky areas, desert regions, Mexican highlands, caves, woods and can even be found in sage brush. The "diamond-back rattler" is the most dangerous of all snakes.

COPPERHEADS, from $2\frac{1}{2}$ to 4 feet long, usually bite more often than the rattlesnakes because they are silent, smaller and not so quickly noticed. They are found mostly where

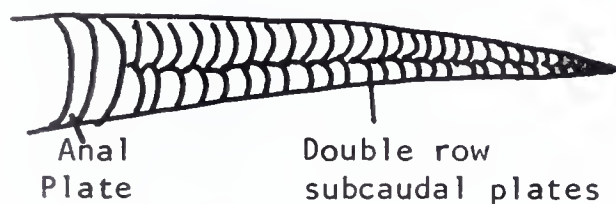
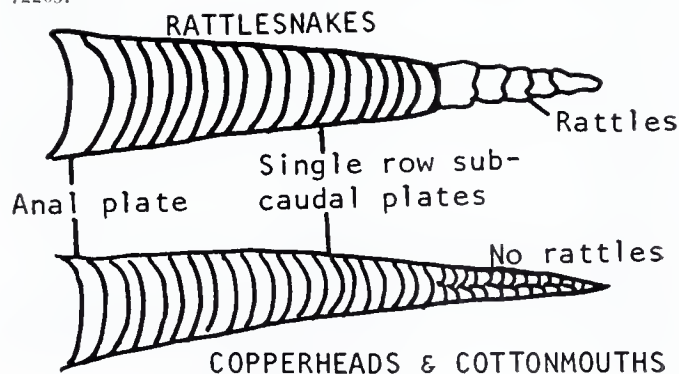
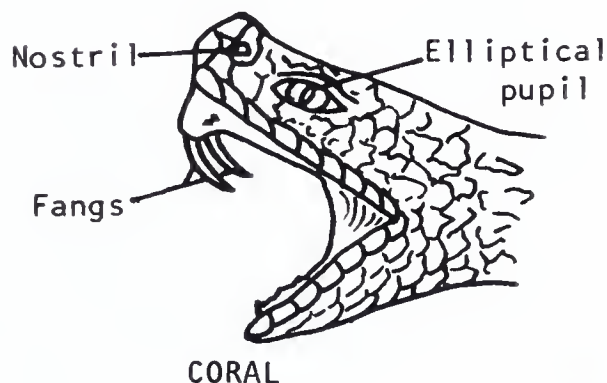
there is rugged land or mountains, but also may be found where crops are growing.

WATER MOCCASINS, called "cottonmouths" because areas around the mouth are white and the interior is dead white, are much larger than Copperheads. They usually are 6 feet long and more dangerous because they like to fight. They can be found along streams, lakes, in some

HARMLESS



POISONOUS (Pit Vipers)



*Director, Division of Veterinary Public Health, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

swamps and particularly along old abandoned rice ditches in the southern states.

CORAL snakes of the elapine group are usually under 3 feet in length and have burrowing habits. They have grooved fangs which make the wound look like a half circle of tiny holes.

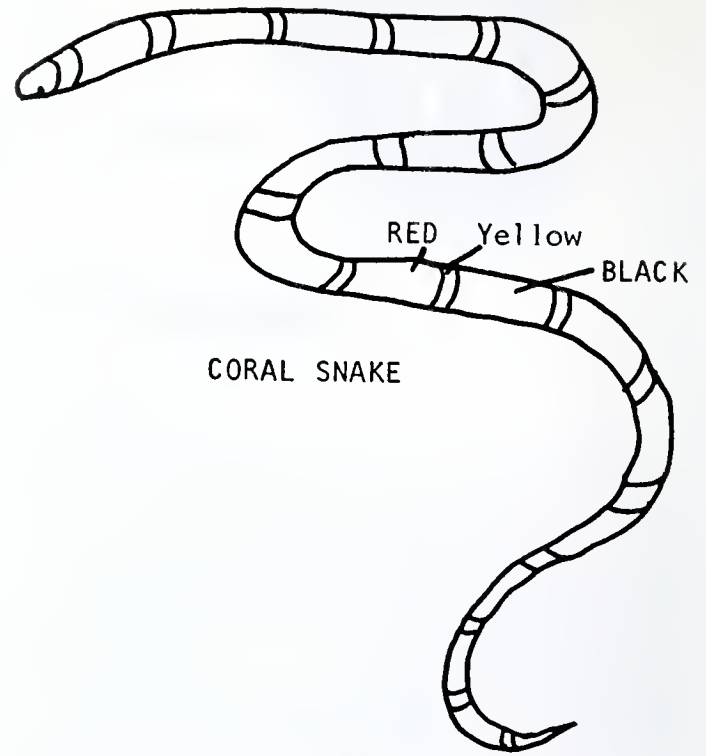
Coral snakes do not strike, but hang on and chew because their teeth are dull. They frequently eat other snakes and are found in arid regions in the southern United States.

The Coral snake is the Texas representative of the Cobra family. The venom, called "neurotoxic", acts on the nervous system, and when death occurs it usually is due to respiratory failure.

The poisonous Coral snake is very similar to the King snake which is NOT poisonous. Several non-poisonous snakes resemble the Coral snake, but in none are the red rings bordered by yellow.

Snakes are more dangerous during spring and summer. Many of them can't stand the heat of day and usually prowl at night. Since they hibernate during the winter, when spring and summer arrive, they often attack because they are hungry and are hunting food.

SIGNS OF SNAKE BITE: Edema (swelling) usually occurs within about five minutes after the venomous snake bite. The venom slowly travels toward the heart through lymph spaces under the skin, therefore the victim should re-



AN HOUR OR SO AWAY: It's usually safer not to cut the skin and suck out the venom. "Woods surgery" has often caused more harm than the bite itself. Incisions may go too deep, sever arteries or veins or result in infection or blood poisoning. It is more effective and far less dangerous to put a constricting band on the limb between the bite and the heart. The band must be loosened every half hour for 3 to 4 minutes to keep the extremity from mortifying from lack of blood. If possible, apply an ice pack, since cold retards the flow of blood.

IF MEDICAL AID CANNOT BE REACHED QUICKLY: Tie a band just tight enough to make the veins stand out, about 2 to 4 inches above the bite. (A boot lace will do if a snake bite kit is not available.) Cut lengthwise along the fang marks on the arm, leg or hand, $\frac{1}{4}$ inch long and $\frac{1}{8}$ to $\frac{1}{4}$ inch deep. Be careful not to sever an artery or nerve. Apply suction, by mouth if necessary, to suck out the poison-filled blood, for several hours. Be sure to loosen the band every 15 minutes for about 2 minutes to prevent gangrene. All jewelry should be removed before the swelling begins.

GET THE VICTIM TO THE DOCTOR AS QUICKLY AS POSSIBLE for an injection of antivenin and antibiotics. The doctor will use sterilized surgical instruments and probably a hand pump to suck out the venom.

ALWAYS carry a first aid kit, snake bite kit and wear leather boots if you're going to be any place that there might be snakes.



main as quiet as possible. Other signs may be bleeding, which may be very slight, burning pain, nausea and vomiting, rapid pulse, low blood pressure, discoloration at the wound and spreading of the swelling. Fatality usually does not occur for 24 to 28 hours. The venom is likely to cause severe pain and the victim may suffer from shock.

WHISKEY SHOULD NOT BE GIVEN. Snake bites usually are on one of the extremities and therefore are easily treated.

WHAT TO DO IF MEDICAL AID IS ONLY



EDITORIAL

Growth Hormone Release Inhibiting Hormone

Alfred Kahn, Jr., M.D.

A generation or so of physicians were taught that the pituitary was the "master gland". There were suspicions for some time that the posterior pituitary was probably under the domination of the hypothalamus. In the last several years, a series of experiments have indicated that the anterior pituitary was definitely subservient to the hypothalamus. Thyrotrophin releasing factor is a substance derived in the hypothalamus which causes the pituitary to release thyrotrophic hormone. Other releasing substances have been found and studied; the chemical composition of some releasing substances has been worked out. Thus, it was abundantly proved that the pituitary gland was not autonomous.

Now a further new element has been injected into these hormone inter-relationships. Now a hormone has been discovered which inhibits growth hormone release properly called "Growth Hormone Release Inhibiting Hormone".

There are two recent articles on GHRH from a group study from the Medical Professional Unit of St. Bartholomews' Hospital of London, Department of Medicine of the Royal Victoria Hospital of Newcastle, and the Veterans Administration Hospital of New Orleans, Louisiana. In the British Medical Journal (Page 352 of March 2, 1974) is an article entitled "Growth Hormone Release Inhibiting Hormone in Acromegaly". The author had previously shown the GHRH inhibited pituitary growth hormone secretion. In this study, the authors used synthetic GHRH on eight acromegalic patients; it was given by intravenous drip, intramuscular injection, and subcutaneous injection in doses varying from 25 ug. to 1000 ug. The 25 ug. dose was too small to bring about a consistent effect. Doses of 100 ug. to 1000 ug. were equally effective intravenously as a drip. Single dose injections regardless of route caused only brief

falls in growth hormone. The acromegalic patients were given a glucose tolerance test and tested with saline intravenously or with GHRH and the typical acromegalic responses were modified. The authors speculate that acromegaly may be a disorder of the hypothalamus characterized by a deficient production or release of GHRH; this would allow the pituitary to over-secrete growth hormone.

The same groups also published an article in The Lancet (Page 697, April 20, 1974) entitled "The Effects of Growth Hormone Release Inhibiting Hormone on Circulating Glucagon, Insulin, and Growth Hormone in Normal, Diabetic, Acromegalic and Hypopituitary Patients". As noted above, GHRH inhibits the release of growth hormone. These studies indicate a decrease in growth hormone output in normal individuals, patients with diabetes mellitus, and patients with acromegaly. It was further shown that GHRH suppresses glucagon — both the basal level and in the provocative test using arginine. Insulin response to arginine injections was also inhibited. GHRH injection also results in increased lipolysis probably due to a fall in plasma insulin. The authors point out that the dosage of GHRH hormone used in these studies should be considered pharmacological rather than physiological. GHRH, they speculate, may have clinical value especially if analogues are developed; they were particularly interested in its relationship to glucagon, whose effects are not completely understood. Perhaps GHRH can be used in acromegaly, insulin secreting tumors, and glucagon secreting tumors.

It is fascinating to see the unraveling of the intricate control system that regulates pituitary function. It appears that the "master gland" is a slave gland and is quite sensitive to both direct and indirect feedback phenomena.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The humdrum hearings on national health insurance (NHI) before the House Ways and Means Committee got something of a lift when the long-absent chairman, Wilbur D. Mills (D-Ark.) unexpectedly showed up on Friday in mid-June and announced that whatever bill his committee approves undoubtedly would not look like any single bill presently under consideration.

This pronouncement from the august chairman immediately gave rise to the belief that closed door talks may be going on among committee members in an effort to hack out a compromise bill that could secure congressional enactment this year.

But the startling lack of interest evident in the House Ways and Means Committee hearings—only two or three members attending each hearing and chairman Mills showing up for just the second time in months—and the indefinite postponement of Senate Finance Committee hearings would seem to say the Congress is not busting its britches to pass a NHI bill this year.

Mills said his own plan (Mills-Kennedy) “doesn’t do everything I would like it to do.” He said, however, he believes the method of reimbursing physicians under Mills-Kennedy is better than under Medicare. It would eliminate the apparent discrimination between the city physician and the rural physician, Mills believes.

He declared his primary concern is that the poor receive at least as good medical services as the rest of the people. Referring to the compromise with Kennedy, he said, “We were trying to lay before the public a program we thought had a chance to pass.” He said he wanted to avoid a bill that “would provide nothing more than catastrophic,” which would cover only five percent of the need. The compromise is subject to further compromise, Mills said. Catastrophic is the roof, and “we need the floor and walls along with the roof.”

Mills said his intent with the Mills-Kennedy compromise NRI bill was not to exceed the cost of the Administration’s “CHIP” plan and to come up with a different method of financing. He said the bill was introduced to present an alternative to the Administration plan for discussion and comment.

Here are selected sample bits of testimony from the many medical-health care oriented organizations who have trooped to Washington to have their say about NHI:

*** The American Public Health Association urged more consumer policy input than provided in any of the major NHI bills before the committee and more preventive services benefits. APHA President C. Arden Miller, M.D., said the major measures for the most part provide insufficient benefits and controls.

*** The American Association of Medical Clinics supported maintenance of the free enterprise system of health care, and said funding should be from mandated employer plans and general tax funds for the poor and medically indigent.

*** The Colorado Health and Environment Council witness discussed the Colorado Community-Cooperative-Decentralized plan which emphasizes preventive medicine and home health care. The importance of the physician’s office as a basic health care facility was stressed.

*** The National Association of Social Workers favored the Kennedy-Griffiths, Health Security Act provisions.

*** The American Academy of Family Physicians told the House Ways and Means Committee any NHI bill must provide that family physicians receive the same fee as other specialists when providing the same service. Family physicians should not be treated as “second class members of the health care delivery team,” said James Price, M.D., Academy President.

Wealthier people should pay a greater portion of the cost for catastrophic coverage as provided in the American Medical Association’s Medi-

credit plan, he told the committee.

"We are skeptical as to just how all-encompassing a program can be effectively administered by the federal government and would strongly urge that, insofar as possible, continued reliance be placed on the expertise which has been developed by the private insurance industry," he said.

Dr. Price opposed a provision of the Mills-Kennedy bill (Medicare for all) regarding payment for services by specialists, saying that the determination of which physicians should not be providing specific services should be left to their peers rather than the Social Security Administration.

*** Another witness, Donald Schiff, M.D., of the American Academy of Pediatrics, said "we must build upon the strengths of our present medical care system, taking special pains to retain the currently productive programs such as Crippled Children's, Maternal and Child Health, and Children and Youth."

Preventive health services should encompass the entire pediatric age scale to 21 years, said Dr. Schiff. Deductibles and co-insurance should not be used for preventive health care for children or pregnant women, he asserted. Comprehensive child health care should be a spelled-out benefit, and increased funding of psychological services is necessary, according to the physician. He urged creation of a cabinet post Secretary of Health.

*** Ned Parish, President of the National Association of Blue Shield Plans, said the concept of a totally tax-supported and government administrated national health program is "a solution for a problem which no longer exists."

"We have built in America a private system which extends to the vast majority of the population and serves most of them quite well," he said.

Declaring that the public does not support radical restructuring of the health system or its financing, Parish said federal action is clearly necessary that would strengthen private coverage and at the same time eliminate problems that "can never be resolved without the active participation of government."

He called for:

- Federal financing of coverage for the poor and medically indigent.

- Catastrophic coverage, not federally-financed, tied to a program of basic benefits.

- Regulation of carriers with respect to covered benefits and solvency.

- Minimum standards for coverage.

- Free choice and maximum participation by the private sector.

*** In other testimony, the U. S. Chamber of Commerce urged approval of its own mandated-coverage NHI plan as "realistic, reasonable and affordable." The Mills-Kennedy plan would lead to "federal domination of the health program" and impose excessive new payroll taxes, the Chamber said. The Administration's "CHIP" plan would significantly increase costs to small and medium sized businesses and the AMA's Medigap plan is not comprehensive enough, according to the Chamber.

*** Pharmaceutical Manufacturers Association President C. Joseph Stetler said the Mills-Kennedy bill provision for a restrictive national formulary for out-patient drugs would distort prescribing decisions. The PMA is most concerned with the proposed price controls on drugs, Stetler testified. This would force a diversion of sales from research-based firms to the non-researching sector, he said.

*** The National Protestant-Catholic Hospital Association said the Mills-Kennedy bill does not adequately ensure that hospitals will be reimbursed for their costs and could force non-profit hospitals "into a hand-to-mouth existence." Voluntary donations would cease, the Association warned.

*** Consumer Federation of America — favored the labor-backed Health Security bill, and argued that sole reliance on payroll tax as in Mills-Kennedy is regressive. The Federation indicated it would prefer a program financed solely out of general revenues.

*** National Cancer Foundation — all bills fall short of providing adequate catastrophic coverage.

*** The National Association for Mental Health — legislation should emphasize outpatient services and stimulate Comprehensive Community Mental Health Centers.

*** National Kidney Foundation — "We have major trepidation about the ability of existing administrative machinery to manage a NHI pro-

gram of far greater dimensions and scope than the end stage renal disease program."

And so the testimony goes — mind boggling from the standpoint of volume to the two or three members of the Ways and Means Committee that must listen patiently all day long every Friday until mid-July.

* * * *

P. O'B Montgomery, M.D., of Dallas, has been nominated by the President to the Board of Regents of the new Uniformed Services University of the Health Sciences.

Dr. Montgomery, a professor of pathology at the University of Texas Southwestern Medical School, was named to serve the remainder of the four-year term of Anthony R. Curreri, M.D., recently appointed president of the new school. The nomination goes to the Senate for approval.

Other members of the board of the new school include Malcolm Todd, M.D., president of the AMA; Charles E. Odegaard, M.D., president of the University of Washington; Joseph D. Matarazzo, M.D., chairman of medical psychology, University of Oregon Medical School; Durward G. Hall, M.D., a recently retired Congressman from Missouri; Alfred A. Marquez, M.D., of San Francisco, and Lt. Gen. Leonard D. Heaton, MC, USA (Ret.).

* * * *

Working on a sweeping tax reform bill, the House Ways and Means Committee tentatively has decided to change the tax laws affecting medical deductions and business expenses that would affect consumers and physicians.

Apparently with an eye on the possibility of a national health insurance program being enacted, the Committee voted to remove the present deduction for one-half the amount an individual pays for his health insurance premium (up to \$150), and to increase the present three percent of income floor applicable to medical expenses to five percent. The one percent of income test for drug costs would be abandoned, with the drug expenses coming under the five percent medical expenses category. Only prescription drugs would be covered.

In addition, the Committee decided to do away generally with the sick pay exclusion under which a tax break is provided employees who are paid while sick beyond a certain length of time.

In the business field, the Committee closed the door on business expenses resulting from attending conventions overseas unless there is an overriding reason for holding the meeting abroad. Not counted would be Puerto Rico, Hawaii, and American possessions. All cruise ship business expenses would not be acceptable, if the Committee's decision should be enacted by Congress.

* * * *

Florida's experience is that the average start-up time for a full service Health Maintenance Organization (HMO) is three to five years, Tampa physician-legislator Richard S. Hodes, M.D., has told the House Ways and Means Committee.

Testifying at the Committee's national health insurance hearings, Dr. Hodes headed a delegation of the National Legislative Conference, an organization of state legislators.

Dr. Hodes outlined Florida's recent activities in health services, noting that unless federal support is continued for such programs as Hill-Burton, Comprehensive Health Planning and Regional Medical Programs, a state's health program might be further snarled by adding national health insurance.

Dr. Hodes is chairman of the Florida House of Representatives Committee on Health and Rehabilitative Services, and heads the Human Resources Task Force of the National Legislative Conference's Intergovernmental Relations Committee.

Florida has had an HMO licensing act for over two years, he noted, but thus far, only five are licensed.

Careful licensing to ensure both the quality care and financial soundness has protected the patient, "but the experience has taught us a hard lesson," he said.

"This lesson is that the average start-up time for a full service HMO is from three to five years, and that the popular conception of HMOs as a panacea for our ills is unfounded," said Dr. Hodes.

"In fact, HMOs have a somewhat limited utility since the institution is totally dependent on resources within the community," he said.

Rural HMOs will require more time and planning before they can become one of the remedies for rural health needs, he added.

YOUR CHANCE FOR INTERNATIONAL INVOLVEMENT

The World Eye Foundation and The Arkansas Partners of the Americas recently sponsored Dr. F. Hampton Roy of Little Rock on a two-week assessment trip of the eye needs and capabilities in Bolivia, South America.

Dr. Roy was part of a group that helped to identify many health care needs and several Bolivian individuals in each major city who were highly motivated toward improving the quality of the Bolivian health care system. However, they were extremely short of medical journals, books, equipment, sutures, drugs, used glasses and other material.

As a tax exempt organization, the World Eye Foundation is trying to help these Bolivians improve their health care system. Any type of medical journals, books, used glasses, equipment, or supplies can be donated for a tax deduction. If no depreciation has been taken on this material, the fair market value of the item may be taken off your income tax. This can be lower or the same as the purchase price. If the item has been depreciated on your taxes, then the value remaining (salvage value) may be deducted. Transportation costs by The World Eye Foundation office can be deducted. A receipt slip signed by The World Eye Foundation representative will be given to the individual to prove his donation with an accompanying list showing the donation.

If you are able to take advantage of the opportunity for international involvement with donations, please forward them to: Dr. F. Hampton Roy, World Eye Foundation, 390 Medical Towers Building, Little Rock, Arkansas 72205. Phone: 501 227-6980.

DIAL ACCESS SYSTEM — CANCER INFORMATION

BIRMINGHAM, Ala. — The Southern Medical Association Cancer Information Center has been refunded for a two-year period by the National Cancer Institute upon completing its first and highly successful year in operation. The announcement was made by Dr. George Carroll, president of Southern Medical Association.

The Dial Access System, a breakthrough in

cancer education, was launched at SMA's 67th Annual Scientific Meeting at San Antonio in November 1973. It is co-sponsored by the University of Texas M. D. Anderson Hospital and Tumor Institute.

A telephone communication and consultation service for cancer education and control, the Dial Access System provides physicians, dentists, nurses, health-science students and other health practitioners with immediate access to the latest diagnostic and therapeutic information regarding human cancer through a simple toll-free telephone call. Phone: 1-800-231-6970.

The system includes five WATS interswitchable lines to tape cartridge players carrying a tape library of 265 different discussions. This concise information is authored by members of SMA with expertise in the study and management of various types of human cancer, and the staff of the University of Texas M. D. Anderson Hospital and Tumor Institute. The tapes are continually updated when new information becomes available.

A complete catalog of the taped conversations was distributed earlier this year to 60,000 physicians by the Southern Medical Association.

"We are highly gratified over the acceptance of this important program," Dr. Carroll said. "The fact that it has been refunded for two years means that we can develop additional areas of coverage and expand and update many phases of the system."

In general, physicians were reassured by the Dial Access System's ability to resolve professional differences of opinion, to provide an immediate prognosis when necessary, to provide directional assistance for further research and to save valuable time.

The Dial Access System is one of several programs of the Southern Medical Association that support the organization's exclusive purpose of developing and fostering scientific medicine.

Based in Birmingham, Alabama, Southern Medical Association is a 22,000-member organization comprised of physicians from 16 southern states and the District of Columbia. The Association will hold its 68th Annual Scientific Meeting in Atlanta, November 17-20.





PERSONAL AND NEWS ITEMS

Physicians Locate

Dr. Pat Black is now associated with the Mountain Home Medical Group, P.A., in Mountain Home, with Drs. Maxwell Cheney, William Snow, Jack Wilson, and Carolyn Wilson.

Holt-Krock Clinic's New Associates

Holt-Krock Clinic in Fort Smith has announced the following new physician associates: Dr. Charles G. Ruel, Neurology; Dr. Jerry O. Lenington, Anesthesiology; Dr. Thomas Williams, Cardiology; and Dr. Michael D. Coleman, Nephrology.

Dr. McKelvey Honored

The Paragould Community Methodist Hospital Board recently honored Dr. Earle McKelvey with a plaque for his twenty-five years of service to that hospital.

Physician Speaker

Dr. Eugene Joseph of DeQueen presented a program on the Therapeutic Application of Basic Hypnosis to the DeQueen Lions Club recently.

DeQueen Clinic Adds Physicians

Dr. Curtis Williams and Dr. William L. Norwood have recently joined the staff of the DeQueen Clinic. Dr. Williams is a radiologist and Dr. Norwood is a general surgeon.

Physician Relocates

Dr. Frank M. James is now associated with Dr. Carl Beck at the Beck Clinic in Mountain View, Arkansas. Dr. James was previously with the George W. Jackson Mental Health Center in Jonesboro, Arkansas.



NEW MEMBERS

Dr. Malcolm Brinkley Pearce

The Pulaski County Medical Society has accepted for membership Dr. Malcolm B. Pearce, a native of Whitesboro, Texas.

Dr. Pearce attended Arlington State College, Arlington, Texas, and the University of Texas at Austin. He was graduated from the University of Texas Southwestern Medical School in Dallas in 1961. His internship was completed at the University of Arkansas Medical Center as well as an Internal Medicine residency, which he completed in 1964. He held a fellowship in Cardiology at the Medical Center from 1964 until 1966.

Dr. Pearce is Board Certified by the American Board of Internal Medicine. He is a member of the American College of Cardiology, the American Heart Association, and a Fellow in the American College of Physicians.

Dr. Pearce is an Assistant Professor of Medicine at the University of Arkansas Medical Center in Little Rock. He specializes in Cardiology as well as Internal Medicine.

Dr. Robert Calvin Galbraith

Dr. Robert C. Galbraith is a new member of the Pulaski County Medical Society. He is a native of Junction City, Arkansas.

He received his B.A. degree from Austin College in Sherman, Texas, in 1962. He was graduated from the University of Arkansas School of Medicine in 1968, and completed his internship at the University of Arkansas Medical Center. From 1971 until 1974, he was a resident in Neurology at the Medical Center in Little Rock.

Dr. Galbraith is practicing Neurology at 300 Baptist Medical Towers, 9600 Kanis Road, in Little Rock.

Dr. Robert Thomas Bulloch

Dr. Robert T. Bulloch has been added to the membership roll of the Pulaski County Medical Society. He is a native of Collins, Arkansas.

Dr. Bulloch attended the University of Arkansas at Monticello and was graduated from the University of Arkansas School of Medicine in 1955. He completed his internship at Parkland Memorial Hospital in Dallas, Texas. He was a resident in Internal Medicine at the Veterans Administration Hospital in Little Rock from 1958 until 1961.

Dr. Bulloch is Board Certified by the American Board of Internal Medicine and a member of the American College of Physicians, American College of Cardiology, American Heart Association, and the Southern Society for Clinical Research.

Dr. Bulloch is with the Department of Medicine at the University of Arkansas Medical Center and specializes in Cardiology and Internal Medicine. He serves as a professor of Medicine at the Medical Center.

Dr. Thomas A. Pullig

The Little River County Medical Society has added the name of Dr. Thomas A. Pullig to its membership roll. He is a native of Magnolia, Arkansas.

He received a B.S. degree from Southern State College at Magnolia in 1964 and a M.S. degree from the University of Arkansas in 1967. He was graduated from the University of Arkansas School of Medicine in 1971. He interned at Saint Elizabeth's Medical Center in Dayton, Ohio.

Dr. Pullig is practicing Family Medicine at the Ashdown Clinic, Ltd., in Ashdown, associated with Drs. James D. Armstrong, N. W. Peacock, Jr., and Joe G. Shelton, Jr.

Dr. Horace L. Green

The Jefferson County Medical Society has accepted for membership Dr. Horace L. Green, a native of Waldo, Arkansas.

Dr. Green attended Southern State College in Magnolia and was graduated from the University of Arkansas School of Medicine in 1969. He completed a straight Pediatric internship and a Pediatric residency at the University Medical Center in Little Rock. He served as an Assistant Professor of Pediatrics at the Medical Center for two years.

Dr. Green is associated with the Children's Clinic, 1420 West 43rd, in Pine Bluff.

Dr. Robert A. Bell

Dr. Robert A. Bell has been accepted for membership in the Pulaski County Medical Society.

He is a native of Pine Bluff, Arkansas.

Dr. Bell received his B.S. degree from the University of Arkansas at Fayetteville in 1963. He was graduated from the University of Arkansas School of Medicine in 1967 and completed his internship at the University of Arkansas Medical Center in Little Rock. He was a Urology resident at the Medical Center from 1971 through 1974.

Dr. Bell is practicing Urology at 518 West 26th Street in North Little Rock.



O B I T U A R Y

Dr. Dewey Willard Sloan

Dr. Dewey W. Sloan of Beebe died July 20, 1972, at the age of 75. He was a 1921 graduate of Vanderbilt Medical School in Nashville, Tennessee.

Dr. Sloan began his practice in Beebe in 1921, and was a member of the 50 Year Club of the Arkansas Medical Society. He was a member of the White County Medical Society and the American Medical Association. He was also a member of the Association of American Physicians and Surgeons and the American Geriatrics Society.

Dr. Sloan is survived by his widow, Mable, one daughter and two sisters.



ANSWER—Electrocardiogram of the Month

Sinus rhythm at 75/min; QRS duration equals 0.10 sec. PR=0.22 with 1° A-V block. Increased voltage in P waves and QRS indicative of atrial and ventricular hypertrophy. Prominent terminal rightward and anterior ventricular forces suggesting RVH. V1 shows a large QR complex which some investigators have associated with massive right atrial enlargement. Cardiac catheterization revealed that this patient has a hypoplastic right ventricle and a massive "single" ventricle with truncus arteriosus.

THINGS TO COME

Medical-Surgical Conference

The Twenty-second Annual Scott and White Medical-Surgical Conference is scheduled for October 1974, at Temple, Texas. Two separate workshops are planned this year.

On October 19th, from 8:00 A.M. until 12:00 Noon, the topic will be "The Thyroid", with a review of the current management of common thyroid disorders. Registration fee is \$35 and the conference will qualify for Category I of the American Medical Association's Recognition Award. NOTE . . . (Texas VS Arkansas Football

game on same day in Austin, only one hour's drive.)

The October 25-26 conference will cover "Recent Advances in Obstetrics and Gynecology". The fee is \$35 and this workshop will also qualify for Category I of the American Medical Association's Physicians Recognition Award.

For further information, write: Dr. Paxton H. Howard, Department of Continuing Education, Scott and White Memorial Hospital, Temple, Texas 76501.



October, 1974

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 71 No. 5

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● Associated
depressive
symptoms

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

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orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or

two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.

For further information on this subject, the following references are provided:

1. Henry BW, *et al*: *Dis Nerv Syst* 30:675-679, Oct 1969.
2. Hollister LE, *et al*: *Arch Gen Psychiatry* 24:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970.

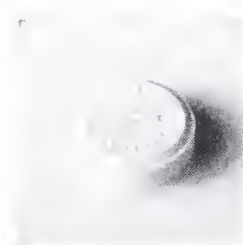
surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or over-sedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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1300 West Sixth Street Little Rock, Arkansas
MR. PAUL C. SCHAEFER, Business Manager
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 71, No. 5. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

The Arkansas Granny Midwife: A Sociological Profile

Alex S. Freedman*

The "granny" midwife in Arkansas is rapidly passing into the background. Her numbers are fewer now than at any time within the past century. Despite the fact that midwives with highly specialized training are being developed in Sweden, France, England, China and the USSR, the situation within the USA and in Arkansas is one of indecision and confusion. The new approach here is for "nurse-midwives" to supplement the old "granny" midwives. The new method anticipates the use of the hospital for delivery of babies formerly delivered in the home. There are two problems which are obvious to the trained observer of rural health: (1) the shortage of nurses in Arkansas and (2) the inability of expectant mothers to pay for physician and hospital services.

"Granny" midwives have no strong state or national organization. They are at the margin of professionalization. They are and have been a "pariah" medical group groping for recognition while traveling the backroads of obstetrics. To a large extent they are operational only so long as the State Health Department allows them to function. Even so, an unfriendly and unsympathetic local physician can prevent them from venturing forth if he refuses to sign their blue delivery cards involving their patients. Thus, the "granny" midwife, usually a black matron living within the rural community, is marked for extinction; she is an obsolete para professional who does not fit within the broad configuration of modern, scientific medicine as presently interpreted and understood.

The debate over the value of keeping the "granny" midwife will go on for some time into the future. One point which should be emphasized here is the humanistic value of her services. The physician has the scientific training but it is the "granny" midwife who is on the scene within the home in time of critical necessity.

She is much more a part of the community than her highly trained counterpart. Also, the ideology of scientific superiority is not, in itself, convincing to a subculture which has never known any other mode of survival but grass roots, pragmatic poverty.

A group of college students involved in the study of sociological methods of research devised a plan whereby they could interview a select group of midwives in order to better understand their problems. They devised a questionnaire which would furnish them with basic data concerning the profession. Prior to developing the questions which were to become a part of the instrument, a "granny" midwife was invited to appear before the students in class. In this way they were able to ask her questions about her own experiences which proved invaluable to the study as a whole.

One of the critical problems in the study was deciding who was and who was not engaged in the "calling" or profession of midwifery. This was partially resolved by developing categories of "active" and "retired" among our select group. Another important event designed to increase our familiarity with the "granny" midwife in Arkansas was to have a representative of the State Department of Health address the class and present a training film (produced in 1936) in order to objectively explain the local situation as well as the regulations controlling the profession. There was considerable attention devoted to the "phasing out" aspects of the program. Thus, our overall methods consisted of a type of "scanning" procedure combined with objective observation and selective sampling. Interviews were conducted in the following counties: Montgomery, Sevier, Little River, Garland, Ashley, Clark, Hempstead, and Nevada.

Age is an important factor for this profession. From a total of 16 respondents the average age of "active" midwives was 60 years and the

*Associate Professor, Division of Sociology, Henderson State College, Arkadelphia, Arkansas.

average for "inactive" midwives was 76 years. Thirteen out of the sixteen respondents were black. Fees for services averaged \$30.83 for the "active" group as compared to \$14.15 for the "inactive" group. Some of the granny "midwives" explained that they had been paid in food or commodities. This was known as being "paid from the garden". An "inactive" respondent pointed out that she started out in 1926 charging \$2.50 per delivery and that in 1934 she increased this to \$5.00. In the 1940's payments climbed to \$10.00 and by the 1950's to \$15.00. During the 1960's she charged \$20.00 and shortly before retirement in 1970 she was receiving \$25.00 for her services.

Some of the respondents claimed that they had

delivered up to 2,000 babies during their length of practice. Many claimed that they had learned their craft from their mothers or a close relative. Fathers of the granny midwives were mostly farmers, preachers or laborers. The profession holds high status in the rural community. The "oldest" mother claimed by one midwife was 49 years and the "youngest" was 11 years. Few stillbirths were acknowledged. There was general consensus that the "grannies" should be kept on; that they are important if not indispensable; that young women should be allowed to train for future services. There was fear expressed by some that mothers, on occasion, might have to deliver their own babies in the future. The single most critical problem of those still active was transportation.



Surgical Treatment of Meniere's Disease

(Problems and Promises)**

Milos Basek, M.D.*

Every active physician will agree that to treat a patient with Meniere's disease is not the most pleasant or satisfying part of his daily practice. The biggest problem of course is that we still don't know the underlying cause of the pathology of this disabling disease. We know that the pathological entity of the inner ear is cochlear hydrops but if it is caused by hyperproduction of endolymph or decreased absorption of it is everybody's guess. Allergies, ischemia of the cochlea, stress and strain causing vascular reactions, slugging of the blood flow, venous stasis of the cochlea—all of these have been blamed—but so far no proof was presented that singled out any one of them. I still remember my surprise (to put it mildly) when I attended the Fourth Workshop on Microsurgery of the Temporal Bone in Chicago in March 1971 and I saw the program. There were 17 different surgical and about 12 medical methods offered for the "cure" of Meniere's disease. You can draw your own conclusion as to what that means.

You are all familiar with the usual medical approach: Patient is told to avoid nicotin (too bad if he doesn't smoke), coffee, tea, cut down on excessive intake of fluids and salt, try to avoid stress and strain (how do you do it these days?) and is put on a trial with different drugs such as: Antivert, Nicotinic Acid, Ronicol, parasympathetic drugs, tranquilizers, etc. And we know that in a good number of patients it works and remissions—sometimes of many years—are not uncommon. In some patients, however, the relief is only a short lasting one or none at all and the frequency of intensity of attacks becomes so severe that the patient becomes virtually disabled and is referred for surgical treatment.

Ultrasound for treatment of Meniere's disease has been used at Columbia-Presbyterian Medical

Center in New York since 1957. Up to the end of March, 1974, we have treated 710 patients and the results can be seen in Fig. 1. Originally the procedure was done through a simple mastoidectomy approach (under local anesthesia), exposing the lateral semicircular canal, thinning down the bone with a diamond burr till a distinct "blue line" could be seen (bone thinned down to 0.25 mm several slides). Ultrasound is then applied for 25-30 minutes till the nystagmus is reversed. Details about technique can be found in literature.^{1,2,3} Since 1967 I have been using exclusively the Round Window technique^{4,5} where the Ultrasound is being aimed into the vestibule through the round window membrane (Fig. 2). The results are the same as with the lateral canal technique (Fig. 1). There is, however, no danger to the Facial nerve and the procedure is more comfortable to the patient.

ULTRASOUND FOR MENIERE'S DISEASE. (May 1957 - April 1974.)

Lateral canal approach:

# of cases	# of failures	% of failures
526	107	20

Round window approach:

184	38	20
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Figure 1

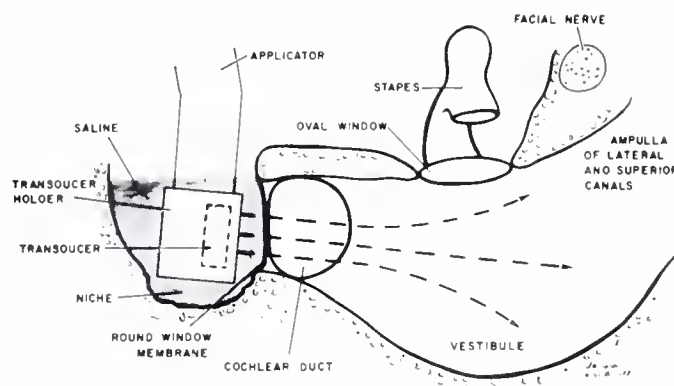


Figure 2

Ultrasound application through round window (From Kossoff, ref. 3.)

*Professor of Ear, Nose and Throat, Columbia Presbyterian Medical Center, New York, New York.

**Presented at the annual meeting of the Arkansas Medical Society, April 28-May 1, 1974, Little Rock, Arkansas.

To conclude: Ultrasound for treatment of patients with Meniere's disease where medical treatment fails represents a useful addition in the armatorium of an otolaryngologist who has to deal with this troublesome condition. Good results are obtained in about 80% of the cases. We do not claim that it is the best treatment, but we do not know of any other technique which is better or more acceptable to the patient at present day.

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Office Orthopaedics

Sprained Ankle, an Aggravating Problem

Leighton Millard, M.D.*

In discussing the problem of sprained ankle the types of sprains should be discussed from the standpoint of whether we are dealing with a well trained skilled athlete, a weekend athlete, or a working man who receives an injury in the course of his usual job. We shall also discuss this from the standpoint of the grade or degree of ankle sprain. The functional anatomy of the ankle, that is the important ligamentous structures, are noted in Figure 1, and further discussion of the function of these ligaments will be undertaken.

The most common type of ankle sprain is the inversion sprain where the foot is plantar flexed, that is the toe is pointed downward, the foot is internally rotated in regard to the tibia, and

severe stress is placed on the foot in this position thereby damaging the ligaments on the lateral aspect of the ankle. As noted in Figure 1, picture A, the calcaneofibular ligament is the most commonly damaged ligament. Occasionally a tear of the anterior fibulotalar ligament will occur first and then a tear of the calcaneofibular ligament. The injury itself should be discussed in terms of three grades; mild, moderate, and severe. The mild injury represents a partial tear or occasional simple stretching of some of the fibers that make up the calcaneofibular and/or anterior fibulotalar ligament. Noted also in Figure 1, a moderate injury or Grade II injury is that in which further tearing of the ligament fibers and particularly complete tearing of the fibers occurs. As noted in picture C, a complete tear is occasionally encountered and at this point

*P. O. Box 5270, Little Rock, Arkansas 72205.

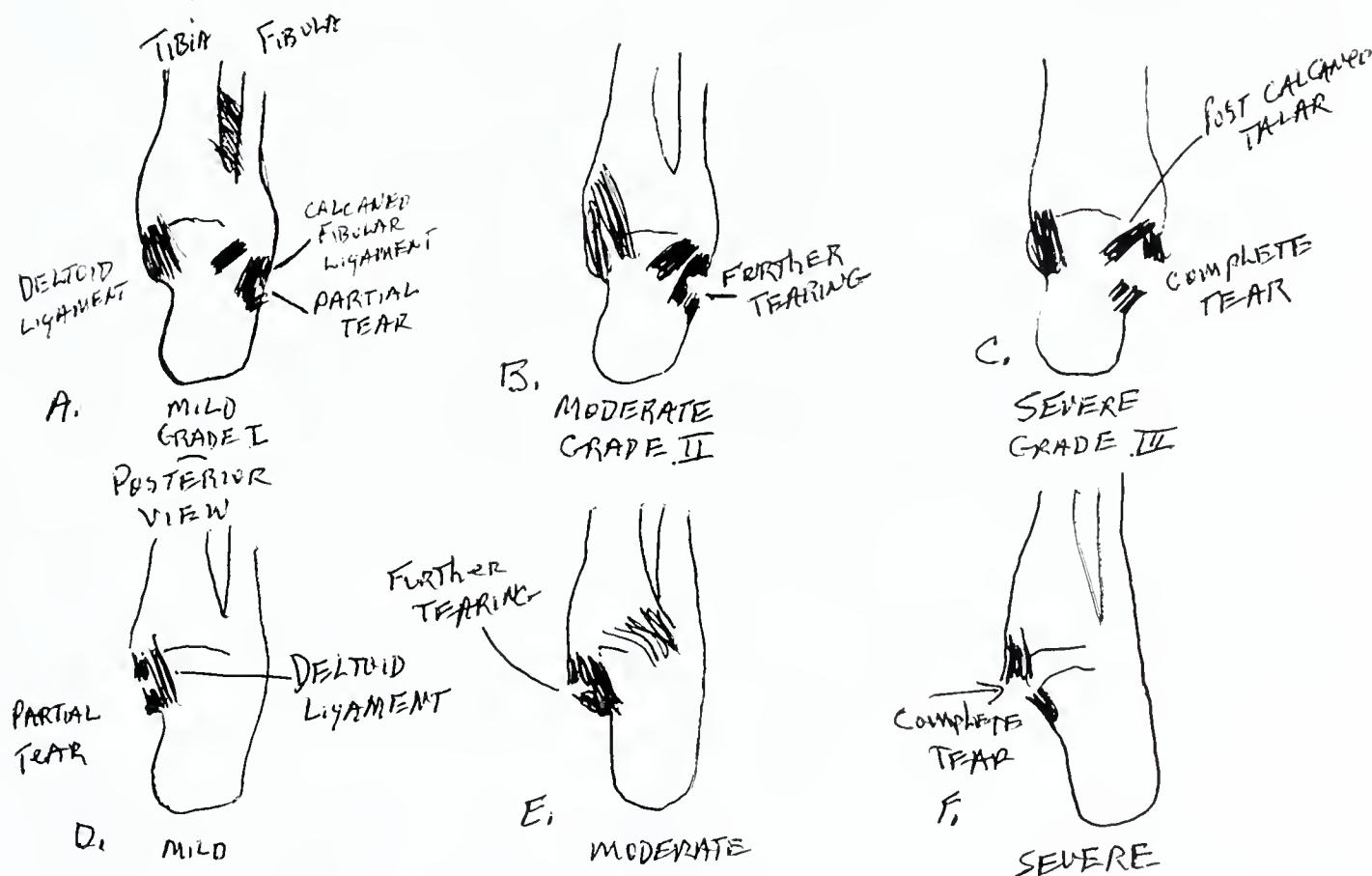


FIG. 1

complete disruption of the ligament means that function of this ligament is completely lost. This injury requires a bit different treatment as will be discussed later. Picture D shows the deltoid ligament which also in an eversion injury may be graded as mild, moderate, or severe, depending on the number of fibers of the ligament that are disrupted or torn.

The physiology of an ankle sprain injury is that of local hemorrhage that causes a reflex muscle spasm in the ankle, foot, and lower leg area, with an interruption of the pumping action of the muscles on the venous and lymphatic systems thereby promoting swelling. A later consequence of this is a sympathetic arterial spasm that reduces blood flow to the area of injury and thereby delays healing. The object of our treatment is to interrupt this cycle of delayed venous return and reduced arterial blood supply so as to improve healing in this area. The treatment, however, should be modified according to the grade of injury.

The estimation of the degree of injury must be made on a clinical basis, although x-rays are mandatory in each of these injuries to rule out fracture. Very careful palpation of the swollen tender area and very careful gentle stress testing of the injured area allows an estimate of the degree of damage to the ligamentous structures. Particularly, palpation of the anterolateral aspect of the ankle joint and also directly lateral at the tip of the lateral malleolus will give some indication of the degree of ligament damage and, of course, the patient's response to pressure in this area is important in estimating this degree. In examining the ankle that is freshly injured this estimation can be quite accurate. Those ankles that have been injured for a long period of time, particularly more than 72 hours, will have to be treated initially with general measures and an estimate of the actual degree of damage will have to be made at a later date and the degree of severity can be estimated on the response of the patient to treatment.

In those patients who show a mild degree of swelling, a mild degree of tenderness, and no evidence of instability to gentle stress testing, the treatment will be the same as for the moderate sprain injury, but need not be carried out for as long a period of time. The general treatment is directed toward interrupting the poor venous return and improving the blood supply to the ligament area by interrupting the reflex muscle spasm and the arterial spasm. To do this, the

patient must walk on crutches with no weight bearing on the injured ankle, apply cold packs to the injured ankle for a period of at least 48 hours, elevate the injured ankle at all possible opportunities, and a compression dressing must be applied. It is suggested here that a simple ace wrap is not enough compression dressing because the usual elastic wrapping will damage the skin if placed tightly enough to improve the swelling and interrupt the spasm cycle. It is recommended that this treatment program be carried out for at least one week in regard to the mild and moderate injuries followed by a second week of exercise without weight bearing, that is, inversion and eversion of the foot in regard to the tibia, and dorsiflexion and plantar flexion exercises with continued non-weight bearing.

In regard to severe ankle injuries where an immediate examination shortly following injury indicates severe swelling, appearance of ecchymosis, and marked tenderness with some evidence of instability to gentle stress testing, the ankle should be casted in a short leg cast and kept immobilized for a period of at least three weeks. A further period of exercise, elevation, mild compression and—at this time—hot packs, will be helpful in regaining function of the ankle and of the damaged ligament. In many cases of severe ankle sprain incurred by an athlete in contact sports, surgical repair is indicated.

In most instances conservative treatment of casting and non-weight bearing followed by exercises will suffice to repair even the severe ligament tear. However, in those cases where multiple sprain injuries have occurred to the same ankle, particularly laterally, stress view x-rays are indicated and possible surgical repair should be considered. It is generally considered that three severe ankle sprains in any given six month period of time is an indication for surgical repair of the instability of the ankle.

In summary, the treatment of the sprained ankle must be carried out according to a clinical estimate of the degree of damage to the ligamentous structures of the ankle joint. It is also suggested that in any case where there is doubt of the estimation of the severity of damage between moderate and severe, that casting with a short leg cast and crutch walking with no weight bearing on the cast should be instituted for a period of at least ten days to two weeks and a new estimate of the degree of instability be carried out at the end of that time.

Is He a Source of Information?

Yes, with certain reservations. The average sales representative has a great fund of information about the drug products he is responsible for. He is usually able to answer most questions fully and intelligently. He can also supply reprints of articles that contain a great deal of information. Here, too, I exercise some caution. I usually accept most of the statements and opinions that I find in the papers and studies which come from the larger teaching facilities. It goes without saying that a physician should also rely on other sources for his information on pharmacology.

Training of Sales Representatives

Ideally, a candidate for the position as a sales representative of a pharmaceutical company should be a graduate pharmacist who has a questioning mind. I don't think this is possible in every case, and so it becomes the responsibility

of the pharmaceutical company to train these individuals comprehensively. It is of very great importance that the detail man's knowledge of the product he represents be constantly reviewed as well as updated. This phase of the sales representative's education should be a major responsibility of the medical department of the pharmaceutical company.

I am certain that most of these companies take special care to give their detail men a great deal of information about the products they produce—information about indications, contraindications, side effects and precautions. Yet, although most of the detail men are well informed, some, unfortunately, are not. It might be helpful if sales representatives were reassessed every few years to determine whether or not they are able to fulfill their important function. Incidentally, I feel the same way about periodic assessments of everyone

in the health care field, whether they be general practitioners, surgeons or salesmen.

Value of Sampling

I personally am in favor of limited sampling. I do not use sampling in order to perform clinical testing of a drug. I feel that drug testing should rightly be left to the pharmacology researcher and to the large teaching institutions where such testing can be done in a controlled environment.

I do not use samples as a "starter dose" for my patients. I do, however, find samples of drugs to be of value in that they permit me to see what the particular medication looks like. I get to see the various forms of the particular medication at first hand, and if it is in a liquid form I take the time to taste it. In that way I am able to give my patients more complete information about the particular medications that I prescribe for them.

capacity they are indeed useful; particularly in the fact that they disseminate broadly based educational material and serve not just as "pushers" of their drugs.

The Other Side of the Coin

Obviously, the pharmaceutical companies are not producing all this material as a labor of love—they are in the business of selling products for profit. In this regard the ambitious and improperly motivated sales representative can exert a negative influence on the practicing physician, both by presenting a one-sided picture of his product, and by encouraging the practitioner to depend too heavily on drugs for his total therapy. In these ways, the salesman has often distorted objective reality and undermined his potential role as an educator.

The Industry Responsibility

Since the detail man must be an information resource as well as a representative of his particular pharmaceutical company, he should be carefully selected and

thoroughly trained. That training, perforce, must be an ongoing one. There must be a continuing battle within and with the pharmaceutical industry for high quality not only in the selection and training of its sales representatives, but also in the development of all of its promotional and educational material.

The industry must be ready to accept constructive as well as corrective criticism from experts in the field and consumer spokesmen, and be willing to accept independent peer review. The better educated and prepared the salesman is, the more medically accurate his materials, the better off the pharmaceutical industry, health professionals and the public—*i.e.*, the patients—will be.

Physician Responsibility

The practicing physician is in constant need of up-dated information on therapeutics, including drugs. He should and does make use of drug information and answers to specific questions supplied by the pharmaceutical representative. However, that informa-

tion must not be his main source of continuing education. The practitioner must keep up with what is current by making use of scientific journals, refresher courses, and information received at scientific meetings.

The practicing physician not only has the right, but has the responsibility to demand that the pharmaceutical company and its representatives supply a high level of valid and useful information. I feel certain that if such a high level is demanded by the physician as well as the public, this demand will be met by an alert and concerned pharmaceutical industry.

From my experience, my impression is that sectors of the pharmaceutical industry are indeed ethical. I challenge the industry as a whole to live up to that word in its finest sense.

Pharmaceutical
Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005

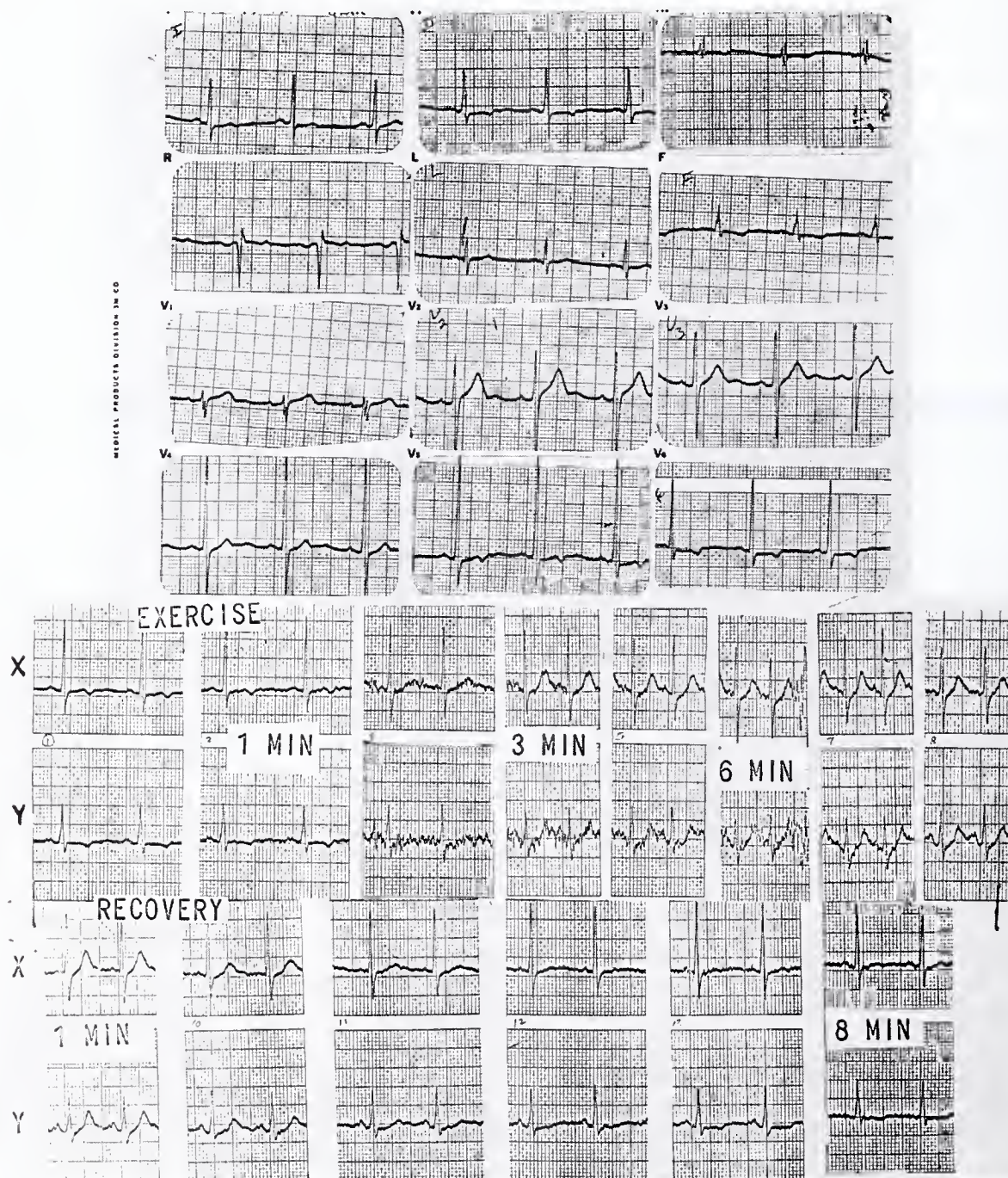




The Department of Cardiology, University of Arkansas Medical Center

(See answer on page 179)

45-year-old male who has never had cardiac symptoms. However, at age 33 he had a "positive" Master's two step test. The following resting and stress ECG was obtained. Orthogonal leads were used for stress testing. Only X and Y leads are shown.



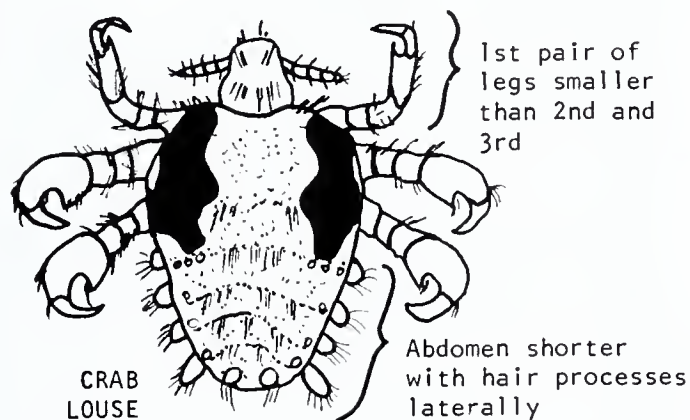
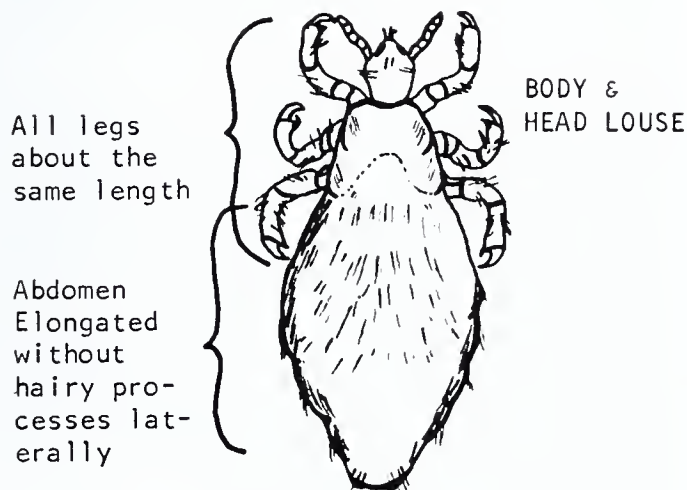
David E. Smith, M.D., Cardiology Fellow
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205

Lice and Their Control

Charlotte Mills*

According to the U. S. Center for Disease Control (CDC), the United States is in the midst of a lice epidemic.

The three sucking lice that infest humans are: the body louse (*Pediculus humanus humanus*), the head louse (*Pediculus humanus capitis*) and the crab louse (*Phthirus pubis*). All three species of lice cause pediculosis. The body louse is involved in epidemics of louseborne typhus, trench fever and relapsing fever.



Sucking lice belong to the order Anoplura. These wingless insects are oval-shaped, flattened and hairy. Sucking lice usually measure less than

one-third of an inch and stay in the white to yellow spectrum. Adult lice have mouthparts consisting of 3 stylets modified for piercing and sucking. The stylets are retracted within the head when not in use. Their legs are short and stout with a large claw on one or more of the three pairs of legs for grasping and holding onto hairs. Lice are good examples of insects with incomplete or gradual metamorphosis, three stages of life: eggs, nymphs and adults.

Sucking lice spend their entire life as ectoparasites on mammals. They have adapted themselves to certain body areas. Head lice are located on the head hair and scalp and rarely leave the body for any reason. Body lice reside in the seams and linings of clothing, blankets and sheets and move to the body to suck the bare skin when hungry. Crab lice infest the hairy portions of the body on and around the pubic areas, but may be found on the chest, armpits, eyebrows or eyelashes.

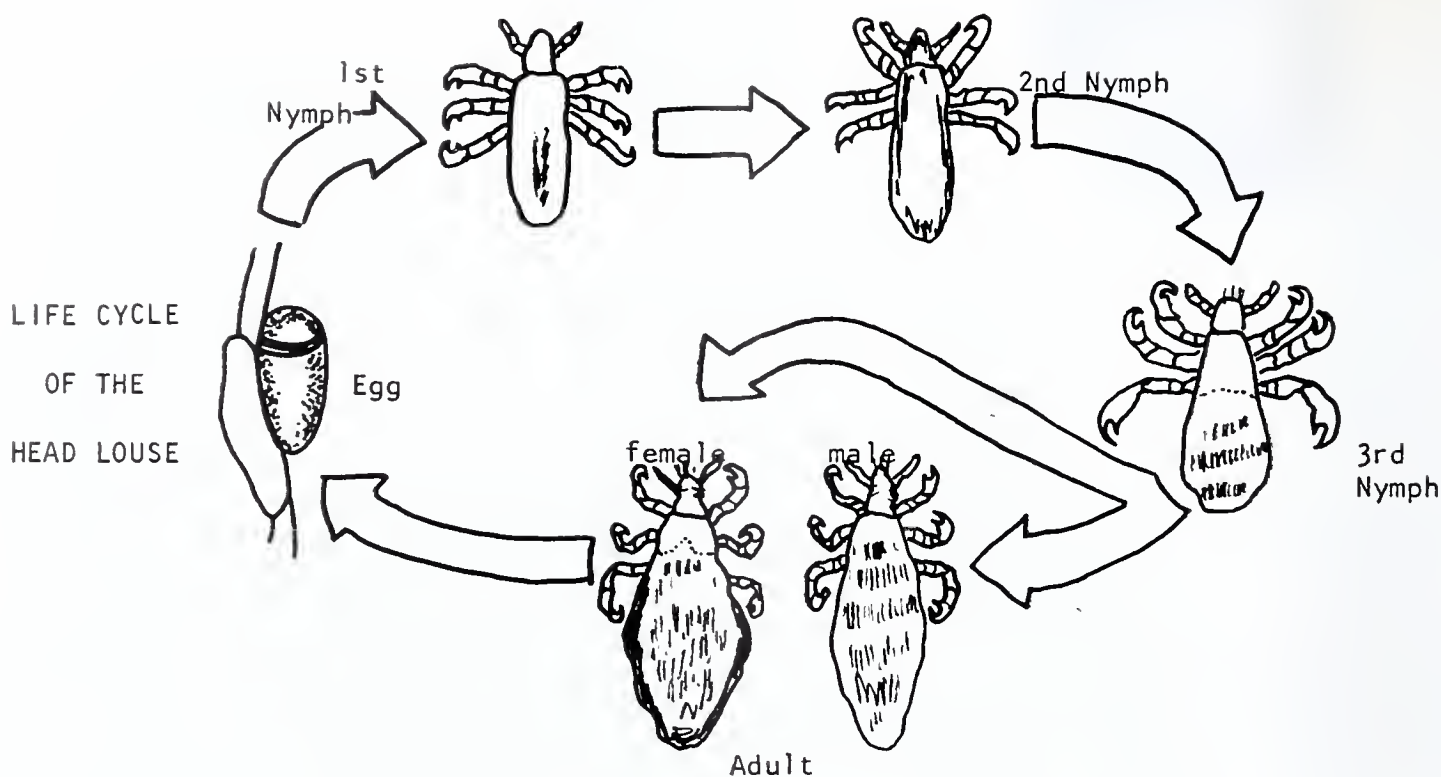
The human louse survives by digging its claws into the skin or scalp, piercing the skin and sucking the blood.

As the lice suck the blood, they inject saliva under the skin. After they've digested their host's blood, the sucking lice deposit excretion which, combined with the saliva, causes the itching. When lice-irritated skin is scratched and opened, bacteria can cause a secondary infection.

Lice travel from an infested person to another by direct contact and indirectly by contact with personal belongings.

Head lice are transmitted through close personal contact or through the use of common combs, brushes or other grooming aids or through the sharing of hats, caps or other head-gear. The eggs (nits) are the easiest stage to discover when inspecting for head lice. The louse egg is distinguished by three distinct

*PH Educator, Division of Vector Control & Recreation, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.



characteristics: the ring at the base of the egg by which it is fastened to the hair; the egg, frequently with a visible embryo inside; and the cap (operculum) with definite pores. Head lice affix each egg to a hair shaft with a waterproof cement-like substance secreted by the female louse.

Body lice are transferred through close personal contact with an infested person or by wearing an infested person's clothing or the use of an infested person's bedding.

Crab lice are spread mainly by sexual contact, but may be transmitted by close personal contact, infested toilet seats and beds.

The three kinds of lice that infest man require different methods of control.

The safest and best materials for head louse control are emulsions containing 0.2 percent pyrethrins, 1 percent lindane (Kwell), 12 percent benzyl benzoate or insecticide dusts containing 1 percent lindane or 1 percent malathion.**

Control of head lice involves destroying both the lice and the eggs. Instructions for using the emulsions should include shampooing and drying the hair thoroughly; seating person in chair with head tilted backward and eyes covered with towel; applying the emulsion to the hair and scalp with a brush; comb the hair in the usual manner; after 10 minutes with the pyrethrin

emulsion or after 24 hours with the lindane or benzyl emulsion, shampoo the hair; dry, comb and brush the hair to remove the dead lice and loosened eggs.

Body lice can be controlled by shampoos or lotions available commercially: A-200 Pyrinat containing 0.2 percent synergized pyrethrins; Cuprex with 31 percent tetrahydronaphthalene and 0.03 percent copper oleate; and Bornate with 5 percent isobornyl thiocyanacetate and 0.6 percent dioctyl sodium sulfosuccinate. Body lice may be controlled with dusts containing 1 percent lindane, 1 percent malathion, or 0.2 percent pyrethrin or 0.3 percent allethrin synergized with piperonyl butoxide.**

The simplest treatment for controlling crab lice is shaving or cutting the infested hair to remove adults, immature stages and eggs glued to the hairs. The following alternate insecticides may be used in control of crab lice: 1 percent lindane or 1 percent malathion powder or emulsions of 1 percent lindane, 0.2 percent pyrethrins plus a synergist, or 12 percent benzyl benzoate.**

Two emulsifiable concentrates for controlling all three species of lice are available by physician's prescription. One contains 1 percent lindane (Kwell) and the second (Topocide) is also known as NBIN.

Lice thrive under conditions of extreme crowding and poor sanitation. As a preventive measure, shower and shampoo regularly and launder your clothes frequently.

**Lice of Public Health Importance and Their Control, U. S. Department of Health, Education and Welfare, Public Health Service, Center for Disease Control, Atlanta, Georgia. Copyright 1973.



EDITORIAL

Support the Medical School

Alfred Kahn, Jr., M.D.

One of the best measuring sticks of a factory is to examine the produce it makes—is the quality good? The same applies to a medical school. One of the best indices of excellence is the performance of its graduates. Applying this simplistic rule to the University of Arkansas School of Medicine, there can be no equivocation concerning the fact that the graduates are well qualified; they are able to compete and hold their own during their internship and residencies with graduates of other schools. This is probably the ultimate criteria.

Of considerable importance in rating a medical school is the determination of whether or not the school is attaining its general aims and goals. Many private medical schools and some state supported schools are emphasizing the training of teachers and specialists. Their program should be attuned to this end. Here at the University of Arkansas School of Medicine, we have certain obvious needs if this School is to fulfill its mission in our milieu: the training of general physicians. This does not mean that the training of specialists and subspecialists has no place in the mix of young physicians; these young specialists are very vital in at least three areas. Firstly, we need to train some young physicians to stay in our Medical School to teach. Secondly, the people in Arkansas should not have to go out of state for the occasional highly specialized service as endoscopy, neurosurgery, etc. Thirdly, to have a cohesive, progressive, practicing medical community requires the cross pollination of new ideas brought in from different medical disciplines. The specialist training is vitally necessary here in Arkansas but its role should be numerically smaller than the general physician.

Probably never in the history of our Medical School has there been an administration so

sympathetically attuned to emphasizing of and promoting of the general physician. A tremendous effort is being made to expand the scope and quality of the general medicine training. The program is being conducted where it should be—both in the University and in private hospitals—thus giving a diversity of exposure. The young physician thus gets an exposure to private practice as well as to the university milieu.

The Medical School is doing another admirable job. It is committed to trying to teach outside of metropolitan Little Rock. One popular aspect of this is the Preceptor Program, which seems to be exceedingly well liked by both the older and younger physician.

The administration at the University of Arkansas School of Medicine has been repeatedly on record in the press as favoring the General Practice Program. Every evidence substantiates this. Despite occasional carping from some sectors, the General Physician Program seems to be off to a good start. The practicing physicians in Arkansas should support the Medical School, especially in this worthwhile General Practice Program.



ANSWER—Electrocardiogram of the Month

The baseline ST-T change normalized during exercise. Although this is unusual, it is a normal response, which has been attributed by some to pre-existence of acute viral myocarditis at some time.

Also, note that the slight J point depression without flattening of the ST segment such as seen at three and six minutes is not significant in terms of an ischemic response.



Nurse Training Program Approved

The Arkansas Board of Higher Education has approved expanded nursing education programs at Arkansas Tech in Russellville.

Arkansas Tech may now offer either an Associate degree in nursing, requiring two years to complete, or a Bachelor of Science degree in nursing, requiring the full four years of college. One hundred twenty-five full time students are expected for enrollment by 1977. The programs have been endorsed by the Arkansas Medical Society and the State Board of Nursing.

* * *

4-H O-Rama Trophies Presented by Society Members

Medical Society members from six districts, including four councilors, the current president, and a past president, were on hand for the awards programs and presentations of trophies during the District 4-H O-Ramas over the State this sum-

mer. The following physicians presented trophies to the first place winners in the junior and senior divisions of the Health Activity: Dr. Ben N. Saltzman, Little Rock; Dr. John B. Kirkley, Jonesboro; Dr. Fred C. Inman, Carlisle; Dr. L. A. Whittaker, Fort Smith; Dr. Paul Gray, Batesville; and Dr. C. C. Long, Ozark.

This was the third consecutive year that the Arkansas Medical Society has underwritten the trophy expense for each District O-Rama Health Contest as well as the State 4-H O-Rama Health Activity. This year the Cooperative Extension Service reported that 1,250 adults and youths participated in the overall activities.

1975 Centennial Plans Gaining Momentum

At the recent meeting of the Medical Society's Annual Session Committee, Dr. Robert F. McCrary of Hot Springs, chairman, reported several ideas were discussed regarding promotion of the Centennial Celebration at the 1975 Annual Ses-



Rebecca Taylor of Cross County, STATE WINNER, and Dr. Ben N. Saltzman of Little Rock, President, Arkansas Medical Society.



Donna Johnson, White County, Dr. Paul Gray of Batesville, Councilor, Second District; and David Kotel of Jackson County.



Eula Golden of Clark County, Dr. C. C. Long of Ozark, Councilor, Tenth District; and Bobby Catts of Yell County.



Janice Stawright of Monroe County, Dr. Fred C. Inman of Carlisle, Councilor, Third District; and Keith Woeltje of Pulaski County.



Jo Ann Aline of North Logan County, Gaylene LeBlanc of Polk County, and Dr. L. A. Whittaker of Fort Smith, Past President, Arkansas Medical Society.



Rebecca Taylor of Cross County, Anita Ashley of Mississippi County, and Dr. John B. Kirkley of Jonesboro, Councilor, First District.

sion. The meeting is scheduled for April 20-23 at the Arlington Hotel in Hot Springs.

An 1870's era atmosphere is expected to be evident throughout the Centennial Celebration. Historical exhibits and perhaps a "Costume Party" one evening will enhance the activities.

Dr. Curtis Clark, Seventh District Councilor from Sheridan, is chairman of the Annual Session Exhibits Committee. Members interested in booth space for either scientific or historical displays are encouraged to contact Dr. Clark at 200 South Rose, Sheridan 72150.

Chairman of the Centennial Committee, Dr. Robert Watson of Little Rock, will welcome ideas and suggestions from members concerning centennial activities during the annual meeting.

* * *

REPORT OF AMA ANNUAL MEETING

June 1974

Chicago, Illinois

Purcell Smith, Jr., M.D., Delegate

A change in the method of electing AMA Trustees, a definitive policy statement on PSRO's, the need for additional safeguards to preserve the confidentiality of medical records, and new recommendations which affect the relationship between hospitals and hospital medical staffs were among the important items approved by Delegates at the 123rd Annual Convention in Chicago. The House approved bylaws changes which replace the "slot method" of electing trustees by the "simultaneous election of candidates to several positions of equal rank," in which all candidates run for board vacancies on a single ballot. Under the new method, trustees for full, three-year terms are elected first, followed by the selection of trustees to fill unexpired terms.

Elections at the Chicago meeting resulted in the selection of Dr. Max Parrott of Portland, Oregon, as President-Elect and Dr. Joseph Ribar of Alaska as Vice-President. Dr. Nesbitt was re-elected Speaker and Dr. Rial was re-elected Vice-Speaker of the House. Trustees elected were Daniel Cloud of Arizona, James Blake of New York, Hoyt Gardner of Kentucky, Raymond Holden of District of Columbia, Frank Jirka of Illinois, and Joe Nelson of Texas.

The Vice-President of the United States, Gerald Ford, addressed the House. He advocated some form of national health insurance, but warned

that in the process of its development, there should be no further erosion of patient confidentiality. He asserted that with the vast resources of the nation, there is "no excuse for a single American to be deprived of the finest treatment available." He said a national health insurance program is necessary because of the prohibitive costs of catastrophic illnesses and the need to more effectively use and distribute medical resources. Among the NHI proposals mentioned by the Vice-President were the Administration's own plan, the Kennedy-Mills measure, and the AMA's Medcredit concept, for which he offered congratulations to the AMA "for its constructive attitude." He added that in the NHI discussion, "the AMA is not the problem but a part of a solution to the problem." The Vice-President asked that physicians be willing to participate in effecting some sort of NHI compromise during the present Congress, "instead of an abdication to those who would impose a dogmatic formula through a veto-proof Congress."

Dr. Malcolm Todd, President of AMA, in his inaugural address urged the AMA to sponsor the development of a "national policy on health" to place needs and goals in focus. He asked the Delegates to consider sponsoring a National Academy of Health to formulate his proposed national policy. The Academy would give both private and public sectors of health care "an open forum and framework in which to exchange ideas, pinpoint health care needs, evaluate total health care resources, and arrive at some common sense of purpose, with sound programs, goals, and priorities." He noted a national policy on health also is called for in Congressional bills that would make health services a public utility. Under one such proposal, a five-man federal commission would make policy recommendations. Such a policy would be "destructive," he said, unless the private sector of care seizes the initiative in formulating it. Dr. Todd also urged the association to make everyone aware that we are for national health insurance as needed, to organize the development of guidelines to protect the privacy of patient information accumulated in computerized health care centers, to assume a new and strong coordinating role in medical education, and to develop nationwide proposals for arbitration and no-fault procedures in malpractice cases.

Dr. Russell Roth, outgoing President of AMA, in his final remarks indicated that he feels there is a new and welcome political awakening and new activism within the ranks of medicine. This rise in political activism, generated by various federal and other third party health care proposals, comes none too soon, according to Dr. Roth, who cited the rising health care activism among politicians. Yet both the public and the politicians are unable to differentiate between good medicine and "the fakes, the phonies, and the frauds on the fringe of medicine," he said. Dr. Roth cited as "a curious exercise in fundamental ignorance" the inclusion by some states of chiropractic services under Medicaid, one state's legalization of acupuncture, and federal legislators who favor rigid quality controls over physicians and osteopaths but agree to pay for chiropractic services in the same piece of legislation. It is against this background, he said, that Congress now wrestles with various NHI proposals, a fact that could make 1974 a banner year for the politically ambitious.

Following is a summary of actions of the House of Delegates, by subject areas:

I. *PHYSICIANS AND THE GOVERNMENT:*

PSRO's—Speculation over possible changes in PSRO policy by the House dominated the attention of those attending the convention, including the news media. Approximately 64 speakers addressed themselves to the PSRO issue at reference committee, regarding two reports and 25 resolutions on this topic. However, the House of Delegates, apparently feeling that all issues had been thoroughly aired, voted to terminate debate after a few minutes, and then adopted a resolution proposed by the reference committee. This resolution instructs the Board of Trustees to seek instructive amendments to the PSRO program, particularly in potentially dangerous areas such as confidentiality, malpractice, development of norms, quality of care, and the authority of the Secretary of HEW. It also directs the AMA to continue efforts to achieve legislation which allows the profession to perform peer review according to established medical philosophy and the best interests of the patient. It further emphasizes that state associations which elect non-compliance with PSRO are not prevented from doing so by the new policy, but urges such associations to develop effective non-PSRO review programs embodying the principles

endorsed by the profession as constructive PSRO alternatives. The new policy also provides that in the event that the PSRO program does, in fact, adversely affect patient care or conflict with AMA policy, then "the Board of Trustees will be instructed to use all legal and legislative means to rectify these shortcomings."

Extension of Policy on National Health Insurance—Two statements on national health insurance were adopted after lengthy debate. One calls on the Board of Trustees to cooperate with state associations "to attempt to devise mechanisms mutually acceptable to the private medical and insurance communities which will ensure the provision of health insurance coverage through the purchase of private health insurance, and to seek means to secure favorable Congressional and public support for their adoption."

During discussion, it was pointed out that the addition to the NHI policy does not affect AMA support for Medigap, but is intended to stimulate new health insurance mechanisms. The second resolution calls on the AMA and component associations to work to detach "any national health insurance program from the controlling intrusions of existing PSRO laws and regulations."

Support for Drug Industry, Action on FDA—The House adopted two resolutions bearing on drugs. One directs the AMA to continue its support of the pharmaceutical industry in efforts to develop and market pharmaceutical products meeting proper standards of safety and efficacy. The other resolution directs the AMA to "exert all efforts to amend or repeal the Kefauver-Harris" drug amendments of 1962, which gave the FDA broad new powers in drug manufacturing and marketing, and which critics of the FDA contend has tended to stifle the developing and marketing of new drugs in the United States.

Oppose "Public Utility" Medicine—The House went on record as being opposed to certain bills in Congress which would replace the federal "Health Professions Educational Assistance Act" which expired June 30. Under the bills, comprehensive health planning programs would be replaced with public utility type bodies which would control certain aspects of health education and health care delivery, and medical licensure.

In other actions affecting physicians and the government, and other third parties, the House

directed the AMA to seek an extension of from 30 to 90 days to respond to proposed health regulations printed in the Federal Register; AMA will also request that government agencies using the Federal Register for rule-promulgating purposes be urged to hold public hearings on the merits of proposed legislation.

II. PHYSICIANS AND THE PUBLIC:

Confidentiality of Patient Records—The House adopted two reports bearing on confidentiality of medical records. Report I of the Council on Medical Service describes a wide-ranging series of proposals to enable the medical profession and insurance companies to "maintain the confidentiality and security of patient information." Report S of the Board of Trustees notes that the Council on Legislation is developing model legislation as a guide to possible state legislation to preserve confidentiality, and that a model bill should be ready for consideration by the House at the 1974 Clinical Session.

Health Insurance for Migrant Workers—Delegates supported in principle a report from the Council on Medical Service for the development of a nationwide health insurance program for migrant workers. The report drew some concern about safeguards for the medical records of migrants. The report was referred to the Board of Trustees for development of appropriate legislation.

Transport of Radioactive Material via Airlines—The House put the AMA on record as recommending that the shipment of radioactive materials for medical use via airlines be shipped "under strictly enforced, existing federal regulations which guarantee the actual low potential hazard" of such materials to passengers and crews, and directed that the recommendation be presented to appropriate federal agencies for implementation.

III. PHYSICIANS AND HOSPITALS AND MEDICAL SCHOOLS:

Report on Physician-Hospital Relations, 1974—The House adopted the 104-page "Report on Physician-Hospital Relations, 1974" compiled by the Council on Medical Service and its Committee on Private Practice. An update of an earlier report made in 1964, the 1974 version contains 14 specific recommendations to cope with problems developing between some hospitals and their medical staffs. Among other things, the recommendations are aimed at protecting med-

ical staffs against unilateral action by hospital governing boards relative to staff bylaws, rules and regulations.

Students, Interns, and Residents—Two informational reports dealing with possible guidelines for housestaffs in developing contracts in institutions in which they serve generated considerable discussion. Because of the importance and the complexity of the issues involved, the two reports, plus a revised report submitted by the Intern and Resident Business Session during the convention, were referred to the Board of Trustees for further study and consultation with appropriate groups.

New Liaison Committee on Medical Education—Delegates adopted Board of Trustees Report I calling for the establishment of a new Liaison Committee on Continuing Medical Education. Structure and duties of the new committee have been worked out by AMA representatives and those representing the American Board of Medical Specialties, the American Hospital Association, the Association of Medical Specialties, and the Council of Medical Specialty Societies.

In other actions, the House supported a moratorium on the licensure of allied health occupations until the end of 1975, reaffirmed the AMA's opposition to blanket pre-admission certification of hospital patients by governmental or hospital edict, and adopted a resolution calling on the AMA to encourage a series of lecture programs from students on the socioeconomic aspects of medicine.

IV. ASSOCIATION AND INTERNAL MATTERS OF THE HOUSE:

Specialty Representation in the House—In response to proposals to increase specialty representation in the House, the Reference Committee on Constitution and Bylaws reported extensive testimony, and urged that "all concerned parties increase communication, cooperation, and liaison" to resolve the complex question. The House adopted the reference committee report, and referred Report H of the Board of Trustees containing proposed modifications for specialty representation in the House to the Council on Constitution and Bylaws for inclusion in its continuing study.

In other internal matters, the House requested changes in the constitution and bylaws to permit additional scientific sessions on a regional basis (to supplement the programs at the annual and clinical sessions).



PERSONAL AND NEWS ITEMS

Dr. Saltzman Joins Medical Center

Dr. Ben N. Saltzman of Mountain Home has been named professor and chairman of the Department of Family and Community Medicine at the University of Arkansas Medical Center. The appointment became effective October 1.

Dr. Saltzman will succeed Dr. John M. Tudor, Jr., who has been acting department head. Dr. Tudor will continue as Department vice chairman and head of residency training programs.

Fire Destroys Dr. Izard's Home

Dr. Ralph Izard's home near Bryant, Arkansas, was recently destroyed by fire. The house was apparently struck by lightning. Dr. Izard's family was away from the home at the time of the fire and there were no injuries.

Nashville's Appreciation Day for Doctors

The Rotary Club and Chamber of Commerce of Nashville recently honored the staff of Memorial Hospital with plaques of appreciation. Honored were Drs. Edwin V. Dildy, John Weson, and M. H. Wilmoth. Two new Howard County physicians received a warm welcome of appreciation in a county needing more physicians. They were Drs. Joe King and Robert Sykes.

New Family Physician Officers

The Arkansas Academy of Family Physicians elected new officers at its recent meeting in Little Rock. New officers are *President*, Dr. Thomas D. Honeycutt of Little Rock; *President-elect*, Dr. Paul Wallick of Monticello; *Vice President*, Dr. Ken Lilly of Fort Smith; and *Secretary-Treasurer*, Dr. James K. Patrick of Fayetteville.

Physician Locates

Drs. Samuel B. Thompson, John D. Christian, and William L. Steele have announced that Dr. Richard J. Nasča is now associated with the TCS Orthopedic Clinic, Suite # 1, Evergreen Place, Little Rock.

New Chiefs-of-Staff Named

Dr. David Lockhart of Forrest City was recently elected as the new chief-of-staff of Forrest Memorial Hospital in Forrest City.

Dr. Robert E. Hoagland of Dumas has been named chief-of-staff at the Desha County Hospital.

Dr. Pope's Office Relocated

Dr. Norton A. Pope has relocated his office to Suite 350, Medical Towers Building, Little Rock,

for the practice of plastic, reconstructive, and cosmetic surgery.

Speakers Bureau

Dr. Morris M. Henry recently addressed the Evening Rotary Club of Fayetteville, representing the Speakers Bureau of the Arkansas Medical Society.

Dr. Townsend TV Panelist

Dr. T. E. Townsend of Pine Bluff represented the Medical Society recently serving as the physician member of a panel discussion on "Social Attitudes of Death" at KETS Channel 2 in Conway.

Ozark Orthopedic Associates

Dr. Don Vowell has announced the formation of the Ozark Orthopedic Associates and the association of Dr. Charles Ledbetter for the practice of orthopedic surgery at 120 East Bower Street in Harrison.

Physician Locates

Dr. William McBryde has joined Dr. Paul S. Read in general practice at the Fairfield Bay Medical Clinic in Fairfield Bay.



THINGS TO COME



Winter Session November 24th

The Winter Session of the Arkansas Medical Society has been scheduled for Sunday, November 24th, at the Downtown Holiday Inn in Little Rock. All members are urged to attend the annual business meeting of the Society.

Medical Society's Centennial Celebration

The 100th anniversary of the Arkansas Medical Society will be observed at the 1975 Annual Session meeting April 20-23 at the Arlington Hotel in Hot Springs. Look for further information in this month's "Medicine in the News."

Allergy in Clinical Practice

The Allergy Division, Department of Medicine, at the University of Oklahoma College of Med-

icine is sponsoring a continuing medical education course entitled "Allergy in Clinical Medicine."

The course is scheduled for November 15-16, 1974, at the Howard Johnson's Motor Lodge, Highway 66 and Lincoln Boulevard, Oklahoma City, Oklahoma. Guest speaker will be Daniel J. Stechshulte, M.D., Associate Professor and Director, Division of Allergy, Clinical Immunology and Rheumatology, University of Kansas Medical Center.

The course hopes to provide practical current information about the diagnosis and treatment of the most commonly encountered clinical problems in Allergy.

The registration fee of \$90 (Interns/Residents \$45) includes luncheons Friday and Saturday and a social hour and dinner Friday evening. Wives of those attending are invited to attend the Friday evening social hour and dinner as guests of the sponsors. Enrollment will be limited to 100 physicians.

For final program and/or further information, write: Office of Continuing Medical Education for Physicians
University of Oklahoma Health Sciences Center
Post Office Box 26901
Oklahoma City, Oklahoma 73190

Two-Week "Emergency Room Medical-Surgical Care" Course

Joint sponsors for a course entitled "Emergency Room Medical-Surgical Care" include Alton Ochsner Medical Foundation, Charity Hospital at New Orleans, Louisiana State University School of Medicine, and Tulane University School of Medicine.

This course in emergency medicine is a two-week course of the lecture-preceptor type. There will be a series of daily informal morning lectures. These lectures will cover many of the serious and common emergencies encountered in the Emergency Room.

The American College of Emergency Physicians has granted ninety-six (96) hours credit toward its continuing medical education requirements.

The course will be held November 11 through November 23, 1974, at the Ochsner Foundation Hospital, 1516 Jefferson Highway, New Orleans, Louisiana 70121. Registration limited to 14. Fee \$400.00.

Direct all inquiries to:

Division of Education
Alton Ochsner Medical Foundation
1514 Jefferson Highway
New Orleans, Louisiana 70121

* * *



NEW MEMBERS

Dr. John Patton Black

The Baxter County Medical Society has accepted for membership Dr. John P. Black, a native of Morrilton, Arkansas.

Dr. Black graduated in 1969 with a B.S. degree from Southwestern at Memphis, Tennessee. He was graduated from the University of Arkansas School of Medicine in 1973. He interned at the University of Arkansas Medical Center.

Dr. Black is associated with the Mountain Home Medical Group, P.A., in general practice, at 353 East 8th Street in Mountain Home.

Dr. James Young Massey

Dr. James Y. Massey has been added to the membership roll of the Baxter County Medical Society. He is a native of Memphis, Tennessee.

Dr. Massey received his B.S. degree from the University of Alabama in 1965. He was graduated from the Louisiana State University School of Medicine in New Orleans in 1969. He completed his internship and residency in Ophthalmology at the University of Arkansas Medical Center in Little Rock.

Dr. Massey is now practicing Ophthalmology at 613 South Street in Mountain Home, associated with Dr. John W. Sneed, Jr.

Dr. Charles Austin Ledbetter

Dr. Charles A. Ledbetter is a new member of the Boone County Medical Society. He is a native of Batesville, Arkansas.

Dr. Ledbetter is a 1963 graduate of the University of Arkansas at Fayetteville. He was grad-

uated from the University of Arkansas School of Medicine in 1967. Dr. Ledbetter completed his internship at the United States Naval Hospital in Jacksonville, Florida, while serving in the Navy. Upon completion of his military obligation in 1970, he entered the Orthopedic Surgery Residency program at the University of Arkansas Medical Center, which he completed in 1974.

He is now practicing Orthopedic Surgery at 120 East Bower Street in Harrison, in association with Dr. Don Vowell.

Dr. Dola Searcy Thompson

The Pulaski County Medical Society has accepted for membership Dr. Dola S. Thompson. She is a native of Benton, Arkansas.

Dr. Thompson attended Little Rock Junior College, and Baylor University in Waco, Texas. She was graduated from the University of Arkansas School of Medicine in 1949. Her internship was completed at Women's and Children's Hospital in San Francisco, California. In 1953, she completed her Anesthesiology residency at the University of Arkansas School of Medicine.

Professional society memberships include: American College of Anesthesiologists, American Society of Anesthesiologists, American College of Chest Physicians, and American Medical Association. She is Board Certified by the American Board of Anesthesiologists.

Dr. Thompson is Professor and Chairman, Department of Anesthesiology, at the University of Arkansas Medical Center in Little Rock.

Dr. Wayne Everett Fortson

Dr. Wayne E. Fortson is a new member of the Pulaski County Medical Society. He is a native of Shreveport, Louisiana.

Dr. Fortson is a graduate of Louisiana Tech University in Ruston, receiving his B.S. degree in 1963 and his M.S. degree in 1969. He was graduated from the University of Arkansas School of Medicine in 1973 and completed his internship at Saint Vincent's Infirmary in Little Rock. In 1974, his Family Practice residency was completed at St. Vincent's Infirmary.

Dr. Fortson is in Family Practice at 6924 Geyer Springs Road in Little Rock, associated with Dr. Harold D. Purdy.

Dr. Lawson Edward Glover, Jr.

The Pulaski County Medical Society has added the name of Dr. Lawson E. Glover, Jr. to its membership roll. He is a native of Fort Worth, Texas.

Dr. Glover received his B.S. degree from the

University of Arkansas at Fayetteville in 1963. He was graduated from the University of Arkansas School of Medicine in 1967. He interned at the University of Arkansas Medical Center. He completed a residency program at the Medical Center in Internal Medicine.

He is Board Certified in Internal Medicine by the American Board of Internal Medicine.

Dr. Glover is an Instructor in Medicine at the University of Arkansas Medical Center in Little Rock.

Dr. Sebastian A. Spades, III

The Lawrence County Medical Society has accepted for membership Dr. Sebastian A. Spades, III. He is a native of Jonesboro, Arkansas.

Dr. Spades received his B.A. degree from Hendrix College in Conway, Arkansas in 1967. He was graduated from the University of Arkansas School of Medicine in 1971. His internship was completed at St. John's Hospital in Tulsa, Oklahoma. He served in the United States Air Force from 1972-74.

Dr. Spades is in general practice at 421 Southwest Third in Walnut Ridge.

Dr. Thomas R. Wallace

The Pulaski County Medical Society has accepted for membership Dr. Thomas R. Wallace, now in Ophthalmology residency training at the University of Arkansas Medical Center in Little Rock.

Dr. Lloyd G. Langston

The Jefferson County Medical Society has accepted for membership Dr. Lloyd G. Langston, a native of Pine Bluff.

Dr. Langston graduated in 1963 with a B.S. degree from Mississippi State University. He was graduated from the University of Arkansas School of Medicine in 1967. His internship and Otolaryngology residency work were completed at Confederate Memorial Medical Center, Shreveport, Louisiana. Following his residency work, Dr. Langston served in the United States Navy for two years at the Naval Regional Medical Center, Oakland, California.

He is a member of the American Association of Ophthalmology and Otolaryngology, the American Council of Otolaryngology and he is Board Certified by the American Board of Otolaryngology.

Dr. Langston is practicing Otolaryngology and Maxillofacial Surgery at 1612-1614 West 42nd, Pine Bluff.

Dr. Kathryn Lloyene Bruce

Dr. Kathryn Lloyene Bruce is a new member of the Jefferson County Medical Society. She is a native of Pine Bluff, Arkansas.

Dr. Bruce received her B.A. degree in 1965 from the University of Arkansas and was graduated from the University of Arkansas School of Medicine in 1969. She completed internship and residency programs at Roosevelt Hospital, New York, New York. From 1972 until 1973, she was a Fellow in Pediatric Cardiology at Roosevelt Hospital, and during 1973-1974 she was a visiting Fellow in Pediatric Cardiology at Harlem Hospital in New York City, employed by Columbia-Presbyterian.

Dr. Bruce is practicing Pediatrics at 1606 West 42nd in Pine Bluff.

Dr. Calvin M. Bracy

A new member of the Jefferson County Medical Society is Dr. Calvin M. Bracy, a native of Little Rock, Arkansas.

Dr. Bracy received a B.S. degree in 1963 and an M.S. degree in 1964 from the University of Arkansas. He was graduated from the University of Arkansas School of Medicine in 1968. He completed his internship and residency in Obstetrics and Gynecology at Hillcrest Medical Center, Tulsa, Oklahoma. From 1972 until 1974, he served in the United States Army at the Redstone Arsenal Hospital in Huntsville, Alabama.

Dr. Bracy is practicing Obstetrics and Gynecology at 1704 West 42nd Street in Pine Bluff.

Dr. Thomas Allen Bruce

Dr. Thomas A. Bruce has been accepted for membership in the Pulaski County Medical Society. He is a native of Mountain Home, Arkansas.

Dr. Bruce received his B.S. degree in 1951 from the University of Arkansas at Fayetteville. He was graduated from the University of Arkansas School of Medicine in 1955. His internship was completed at Duke University Hospital, Durham, North Carolina. Dr. Bruce completed Internal Medicine residencies at Bellevue (Cornell) Hospital, New York City, in 1957; Memorial Hospital for Cancer and Allied Diseases, New York City, in 1958; and Parkland Memorial Hospital, Dallas, Texas, in 1959. He was a Cardiopulmonary Fellow from 1959-1960 at the University of Texas Southwestern Medical School in Dallas. From 1960-1961 he was a Cardiac Residency Fellow at the University of London Postgraduate Medical School, London, England.

Dr. Bruce is Board Certified by the American Board of Internal Medicine. He is a member of the American College of Physicians and the American College of Cardiology. He was a Professor of Medicine at the University of Oklahoma College of Medicine.

Dr. Bruce is now the Dean, School of Medicine, University of Arkansas School of Medicine.

Dr. Hubert Charles Peterson

Dr. Hubert C. Peterson is a new member of the Baxter County Medical Society. He is a native of Marshall, Arkansas.

Dr. Peterson attended the University of Arkansas at Fayetteville and was graduated from the University of Arkansas School of Medicine in 1968. His internship and Pathology residency work was completed at Mercy Hospital, Des Moines, Iowa. He is a member of the American College of Pathologists and the American Society of Clinical Pathologists. He is certified in both Anatomic Pathology and Clinical Pathology by the American Board of Pathology.

Dr. Peterson is practicing Pathology at the Corpus Christi Naval Hospital, Corpus Christi, Texas, while serving in the United States Navy.

RESOLUTIONS



WHEREAS, the members of the Pulaski County Medical Society wish to express their sense of loss by the death of their colleague, Walter Gilbert Eberle, II, M.D., and

WHEREAS, Dr. Eberle had earned the deep respect of members of the profession for his skill and knowledge in caring for those patients who sought his help at the time of illnesses; and

WHEREAS, this loss is one shared by the community as well as by the profession;

BE IT THEREFORE RESOLVED:

THAT, this Society extend its heartfelt sympathy to the members of Dr. Eberle's family; and

THAT, this resolution be made a part of the permanent records of the Society; and

THAT, a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
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November, 1974

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

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For further information on this subject, the following references are provided:

1. Henry BW, *et al*: *Dis Nerv Syst* 30:675-679, Oct 1969.
2. Hollister LE, *et al*: *Arch Gen Psychiatry* 24:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970.

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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Breast Cancer: Treatment by Chance

Kent C. Westbrook, M.D.*

One woman out of sixteen develops breast cancer and over 30,000 American women die yearly of this disease. Radical mastectomy has been accepted as optimal therapy since the 1890's. Today, however, controversy rages concerning the proper treatment of operable breast cancer. This paper will review the current therapeutic dilemma, discuss previous clinical studies, and outline a current clinical trial.

I. ALL BREAST CANCER IS TREATED BY CHANCE.

Chance, N., the absence of any known reason why an event should turn out one way rather than another. The treatment of all patients with breast cancer is determined by chance as demonstrable valid reasons for therapeutic regimens do not exist.

Table I outlines the treatment recommended by world authorities for State I (tumor limited to the breast without clinically positive nodes) carcinoma of the breast located in the central

aspect. Recommended treatment varies tremendously. Treatment of an individual patient depends on where she lives and whom she consults. Therefore, treatment of all patients is determined by chance.

II. PREVIOUS RANDOMIZED STUDIES HAVE NOT ANSWERED CRUCIAL QUESTIONS.

Several prospective clinical trials have been conducted to evaluate treatment regimens for breast cancer (Table 2). The more important of these will be reviewed.

TABLE I
CURRENT TREATMENT OF CLINICAL
STAGE I BREAST CANCER

<i>Treatment</i>	<i>Author</i>	<i>Reference</i>
Partial or Simple Mastectomy	Crile	1
Modified Radical Mastectomy	Madden	2
Radical Mastectomy	Finney	3
Extended Radical Mastectomy	Urban	4
Partial Mastectomy + XRT	Peters	5
Simple Mastectomy + XRT	Kaae & Johansen	6
Radical Mastectomy + XRT	Haagensen	7
XRT = Radiotherapy		

TABLE II
RANDOMIZED CLINICAL STUDIES

<i>Study</i>	<i>Author</i>	<i>Reference</i>
SM + XRT vs. ERM	Kaae & Johansen	8
ESM + XRT vs. RM + XRT	Brinkley & Haybittle	9
PM + XRT vs. RM + XRT	Atkins, et al.	10
RM + XRT vs. RM + Delayed XRT	Patterson & Russell	11
RM vs. RM + XRT	Fisher, et al.	12

PM = Partial Mastectomy
SM = Simple Mastectomy
ESM = Extended Simple Mastectomy
RM = Radical Mastectomy
ERM = Extended Radical Mastectomy
XRT = Radiotherapy

Kaae and Johansen of Copenhagen, Denmark, compared simple mastectomy plus radiotherapy with extended radical mastectomy in patients with operable breast cancer (Table 3). Cases were randomized based on their unit number. Group A received simple mastectomy followed by radiotherapy by the McWhirter technique. Group B received an extended radical mastec-

*Department of Surgery, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205.

TABLE 3

Kaae & Johansen

PATIENTS: Operable

STUDY:	A	B
	Simple Mastectomy + Radiotherapy	Extended Radical Mastectomy
Patients	149	153
10 Yr. Survival	46%	49%
10 Yr. Disease free	42%	42%

CONCLUSIONS:

Survival	A = B
Recurrence	A = B
Morbidity	B > A

tomy with dissection of the supraclavicular area and the second to fourth intercoastal spaces by the method of Dahl-Iversen. The authors concluded that simple mastectomy plus irradiation is equivalent to extended radical mastectomy in all stages with regard to cure and local control at 10 years.⁸

Brinkley and Haybittle in Cambridge, England limited their study to patients with Stage II disease, an operable lesion with movable clinically positive axillary nodes. (Table 4). Patients

TABLE 4

Brinkley & Haybittle

PATIENTS: Clinical Stage II

STUDY:	A	B
	Extended Simple Mastectomy + Radiotherapy	Radical Mastectomy + Radiotherapy
Patients	113	91
10 Yr. Survival	46%	49%
10 Yr. Disease Free	46%	46%

CONCLUSIONS:

Survival	A = B
Recurrence	A = B
Morbidity	B > A

were randomized between extended simple mastectomy or radical mastectomy. All patients received comprehensive radiotherapy. The authors concluded that survival and local recurrence rate were similar at 5 and 10 years. Morbidity was greater in patients receiving radical mastectomy. They stopped the trial feeling that extended simple mastectomy plus irradiation was the superior form of therapy.⁹

Atkins, et al., from Guy's Hospital in London, England, limited their study to patients over 50

with operable breast cancer. Patients were randomized between partial mastectomy plus comprehensive radiotherapy and radical mastectomy with peripheral lymphatic irradiation. (Table 5).

TABLE 5

Atkins & Hayward

PATIENTS: Operable, Over 50

STUDY:	A	B
	Partial Mastectomy + Radiotherapy	Radical Mastectomy + Radiotherapy
Patients	182	188
10 Yr. Survival		
Stage I	81%	78%
Stage II	30%	61%

CONCLUSIONS:

Stage I Survival	A = B
Stage I Recurrence	A > B
Stage II Survival	B > A
Stage II Recurrence	A > B

In patients with Stage I disease, 10 year survival was similar in the two groups. In Stage II disease, survival was significantly higher in the radical mastectomy group. Local recurrence was greater in the partial mastectomy group. Radiotherapy dosage was quite low in this study. Also, the 10 year survival of 61% in patients with Stage II disease treated with radical mastectomy is much higher than most authors report. The authors concluded that the treatment regimens are equal in Stage I disease, but radical mastectomy is superior in Stage II disease.¹⁰

Patterson and Russell of Manchester, England, performed a study including all patients referred to the radiotherapy center following radical mastectomy (Table 6). Patients were randomized between immediate postoperative radiotherapy and delayed radiotherapy for recurrent disease. Radiotherapy early in the study was by a quadrate technique and later by a peripheral lymphatic technique. At 10 years, survival was similar in the two groups. Local recurrence was greater in patients not receiving immediate postoperative radiotherapy. However, treatment of recurrences equalized the local control rate in the two groups. The authors concluded that immediate postoperative radiotherapy after radical mastectomy was not indicated.¹¹

The largest and best controlled evaluation of postoperative radiation therapy was performed

TABLE 6

Patterson & Russell

PATIENTS: Post Radical Mastectomy		
STUDY:	A	B
	Radical	Radical
	Mastectomy + Immediate	Mastectomy + Delayed
	Radiotherapy	Radiotherapy
Patients	707	750
10 Yr. Survival	46%	49%
Local Recurrence	19%	32%
Uncontrolled		
Local Disease	14%	16%
CONCLUSIONS:		
Survival	A = B	
Recurrence	B > A	
Controlled to	A = B	

by the National Surgical Adjuvant Breast Project group reported by Fisher, et al. (Table 7). Patients included those with operable breast cancer and were randomized between radical mastectomy alone and radical mastectomy plus peripheral lymphatic irradiation. There was no difference in survival at 5 years. Local recurrence was decreased but distant metastasis increased in patients receiving irradiation. The percentage of patients free of disease in each group was not significantly different at 5 years regardless of primary location, menopausal status, or nodal

TABLE 7

Fisher, et al.

PATIENTS: Operable		
STUDY:	A	B
	Radical	Radical
	Mastectomy	Mastectomy +
		Radiotherapy
Patients	633	470
5 Yr. Survival	62%	56%
CONCLUSIONS:		
Survival	A = B	
Local Recurrence	A > B	
Distant Metastases	B > A	

status. The authors concluded that postoperative radiotherapy was not indicated following radical mastectomy.¹³

These clinical studies have not answered certain crucial questions. In several studies, the radiation therapy was of a low dosage (about 3,000 rads) and was given with 250kv equipment. Certainly modern radiotherapy is superior to this. Careful prospective monitoring of the surgery and radiotherapy was not performed in many of the studies. Currently, the most important question is whether a simple mastectomy alone, simple mastectomy plus irradiation, or radical mastectomy is the best treatment for operable breast cancer. This question has not

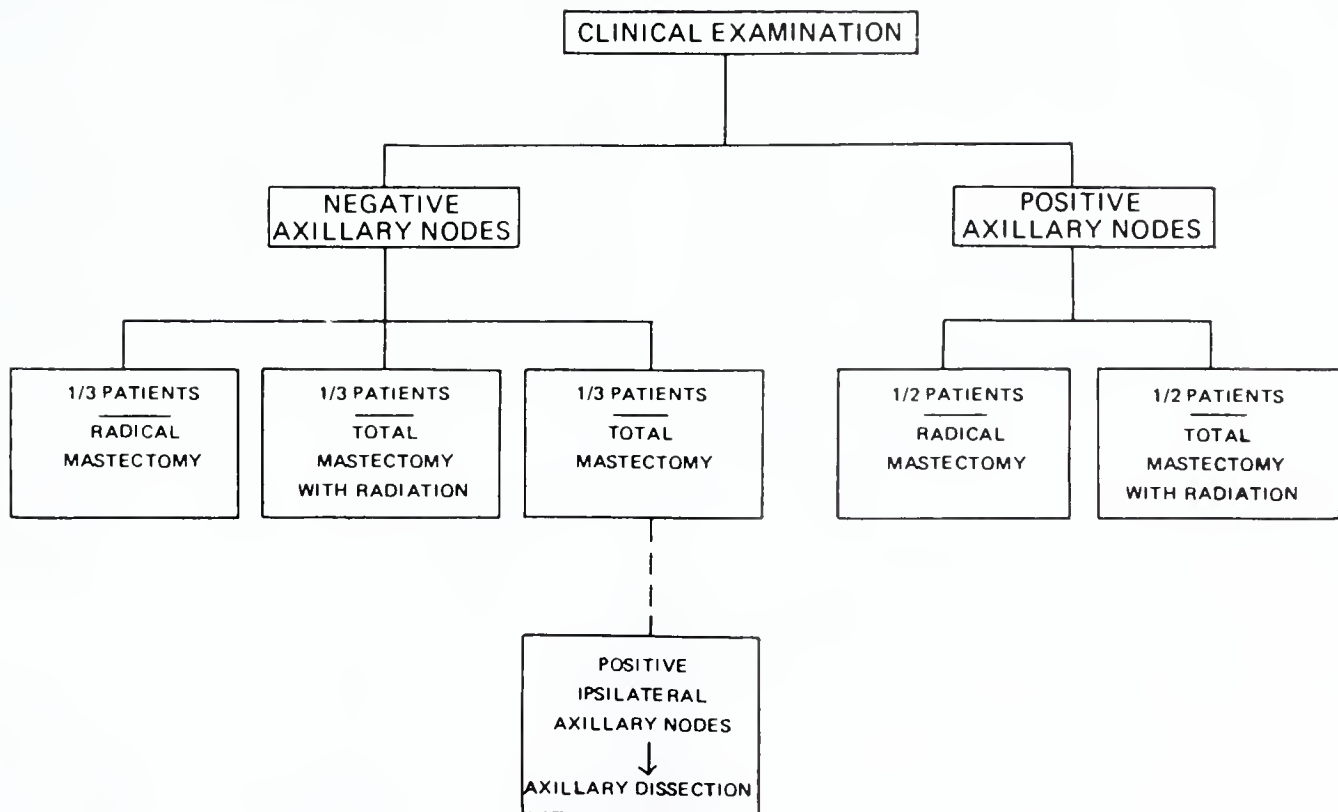


Figure 1

been conclusively answered by any of these randomized studies.

III. CONTROLLED RANDOMIZED STUDIES ARE MORALLY AND MEDICALLY NECESSARY.

Since breast cancer is such a common disease, definite therapeutic answers are imperative. The only way to obtain conclusive answers is through carefully planned and controlled clinical trials. Such a trial is currently in progress (Figure 1).

The National Surgical Adjuvant Breast Project is evaluating radical mastectomy and total mastectomy (simple mastectomy) with and without irradiation in the primary treatment of breast cancer. Patients with clinically negative axillae are randomized to either radical mastectomy, total mastectomy, or total mastectomy with radiotherapy. Patients with clinically positive axillae are randomized to either radical mastectomy or total mastectomy with radiotherapy. Approximately 40 institutions including the University of Arkansas Medical Center are participating in this study. The study was begun in 1971 and patient intake will be completed by 1974. Results, however, will not be available for several years.

IV. SUMMARY

Review of the current status of the treatment of operable breast cancer leads us to the following conclusions:

1. All breast cancer is treated by chance.
2. Previous randomized studies have not answered crucial questions.
3. Controlled randomized studies are morally and medically necessary.
4. Surgeons should support and follow such studies.
5. Surgeons not involved in studies should continue with their usual treatment of

breast cancer (usually radical mastectomy) until data proves another method better.

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Hodgkin's Disease Terminating in Acute Leukemia

Allan S. Pirnique, M.D.*

This case presentation is that of Mr. R. Z. H., a 56-year-old American Indian/Negro man who developed a solid tumorous mass which encroached on his spinal column. Shortly after developing this mass, he died in a blood picture of acute leukemia. Initially, the solid mass that had encroached upon his spinal column was signed out as Hodgkin's disease. This paper deals almost entirely with Hodgkin's disease terminating in acute leukemia. Following Mr. R. Z. H.'s death, developments arose which indicated that the diagnosis of Hodgkin's disease was in considerable doubt and, indeed, was probably incorrect. The detailed case summary will be found later as well as consulting pathologists' reports concerning the pathological material available.

Hodgkin's disease terminating in acute leukemia has been reported infrequently. Crosby¹ reported that in a survey of an estimated 10,000 cases of Hodgkin's disease there were only 17 cases of acute granulocytic leukemia complicating the Hodgkin's disease. In reviewing the American literature, I can find only 10 well-documented cases of Hodgkin's disease terminating in acute myeloblastic leukemia. These 10 reported cases are summarized later in this article.

It has been indicated that perhaps irradiation has played some role in cases of Hodgkin's disease terminating in myeloblastic leukemia. Crosby¹ indicated this in his survey report and, in this report, mentioned that the incidence of acute granulocytic leukemia in patients with Hodgkin's disease is about a ten-fold excess above what would be expected from a normal population. Steinberg, Geary, and Crosby² also indicated that acute granulocytic leukemia was possibly related to radiotherapy that the patients had received. Irradiation has been shown to be an important factor in some patients that have developed acute leukemia.^{3, 4}

Case Summary of Mr. R. Z. H.

Mr. R. Z. H. was a 56-year-old American Indian/Negro male who was hospitalized first in El Dorado on the 20th of January, 1971, because of a six-week history of weakness, back pain,

anorexia, and weight loss. Examination revealed some soreness over his left posterior iliac crest region and a temperature of about 101° F. His blood count on the 29th of January, 1971, showed a white count of 30,000; 70 segs, 10 stabs, 11 lymphs, 2 monocytes; and a hematocrit of 39.2. The patient did have a very faint left upper lobe infiltrate and a 12 mm. Intermediate PPD. Three sputa and one urine were all negative for acid-fast smear and culture. The patient was started on anti-tuberculous therapy with INH and PAS and he initially seemed to have some response in his fever and was discharged on the 4th of February, 1971. His back pain at that time was felt to be degenerative arthritis of the lumbar spine with probable acute disc syndrome.

His second admission was on the 27th of February, 1971, when he entered the hospital because of increasing pain in the left hip area with radiation down the left thigh and left leg. He had also noted marked weakness in this extremity and was unable to walk without support. Examination revealed marked weakness of the left lower extremity with tenderness over the left posterior iliac crest. There was bilateral quadriceps atrophy, perhaps a bit more on the left. The left patellar reflex was unobtainable. His c.b.c. at that time showed a white count of 28,400 with 77 segs, 9 lymphocytes, 6 stabs, 2 juveniles, 1 myelocyte, and 4 monocytes. A bone marrow examination at that time revealed atypical cells suggesting the presence of Hodgkin's disease. A myelogram shows compression at about L-3 level. On the 4th of March, 1971, the patient had a hemilaminectomy of L-2, L-3, and L-4. A tumor mass surrounding the dura was removed. Pathology report of this tumor mass arising from L-3 was Hodgkin's sarcoma. The patient was treated with 3,320 roentgens to this area between 8 March and 26 March. He had considerable improvement with return of some of his neurological deficit. The patient was given nitrogen mustard on the 14th of March, 1971, and also on the 27th of March, 1971, at a dose of 0.3 mg. per kilogram each time. On the 15th of March, 1971, his white count was 29,000 with 77 polys, 1 lymph, 10 stabs, 1 eosinophil, 4 juveniles, 4 myelocytes; his hematocrit was 28; his platelet

*714 West Faulkner, El Dorado, Arkansas 71730.

count was 387,000. Because of suspected hemolysis he was started on Prednisone therapy on the 7th of March, 1971. The patient's c.b.c. on 18 March, 1971, showed white count of 14,800 with 84 polys, 4 lymphs, 4 stabs, 2 eosinophils, 3 myelocytes, and 3 blasts were present; hematocrit was 27; platelet count was 567,000. On the 26th of March his white count was 14,600 with 94 polys, 4 lymphocytes, 1 monocyte, 1 eosinophil; platelet count of 198,000.

His last admission was on the 30th of March, 1971, when he entered the hospital with marked hematemesis. He had a progressively downhill course over the next 10 days and expired on the 8th of April, 1971. His white count on the 31st of March, 1971, was 17,000 with 89 polys, 11 blast cells; platelet count of 90,000 and hematocrit of 24.6. He subsequently developed 80 percent blasts over the next nine-day period of time. His platelet count fell to 12,000 and his hematocrit

Date	WBC	Segs	Blasts	Stabs	Lymphocytes	Mono-cytes	Juveniles	Myelo-cytes	Eosinophils	Platelets	Hct.
1-29-71	30,000	70		10	11						39.2
2-27-71	28,400	77		6	9	4	2	1			
3-15-71	29,000	77		10	1		4	4	1	387,000	28
3-18-71	14,800	84	3	4	4			3	2	567,000	27
3-26-71	14,600	94			4	1			1	198,000	
3-31-71	17,000	89	11							90,000	24.6
4-8-71	18,600	18	80		2					12,000	14

fell to 14. The blood counts are summarized in the following table:

The reported cases of Hodgkin's disease terminating in acute leukemia are summarized in Table I. The ages of these patients varied from 9 years to 59 years. There were four women and six males. Seven of the patients were white, one was a Philippino, and two were not reported as concerning race. The total irradiation therapy to each patient ranged from 2,000 roentgens to 27,025 roentgens. All except for two patients received some type of chemotherapy in addition to their radiotherapy. The duration from diag-

nosis of Hodgkin's disease to diagnosis of acute leukemia varied from 7 months to 223 months (18 years, 7 months). The duration of initial irradiation therapy to development of leukemia was on the same order as duration of Hodgkin's disease diagnosis to leukemia diagnosis, i.e., from 7 months to 219 months (18 years, 3 months).

Extensive irradiation therapy for Hodgkin's disease has been shown to be without question the most important means of therapy for this life-threatening disease.¹⁴ With increasing use of high-dose irradiation therapy for Hodgkin's disease, one might see an increase in incidence of

TABLE I.

HODGKIN'S DISEASE (INITIAL DIAGNOSIS)												
Case No.	Ref. No.	SITE & HISTOLOGIC TYPE	DATE	AGE	SEX	RACE	RADIOTHERAPY (Total Roentgens) Initial Rx. Last Rx.	CHEMOTHERAPY for Hodgkin's: Type Dates	Age at diagnosis of leukemia. Date	Duration Hodgkin's Leukemia	Duration Initial X-Ray Leukemia	Duration Final X-Ray Leukemia
I	5	Right Supraclavicular Node Biopsy. Type ?	Nov., 1957	23 yrs.	F	?	2000 r. May, 1959 - I. May, 1959 - L.	Nitrogen Mustard: Nov., 1957. Chlorambucil: Nov., 1957. Prednisone: May, '60.	26 yrs. May, 1960	30 months	12 months	12 months
II	6	Cervical and Supraclavicular nodes. "lymphohistiolytic"	Jan., 1968	59 yrs.	M	Philippino	13,100 r. Jan., 1968 Jun., 1968	Prednisone: April, 1968. Vinblastine: April, 1968.	60 yrs. Aug., 1968	7 months	7 months	2 months
III	7	Cervical Node Biopsy. Nodular sclerosis.	May, 1960	33 yrs.	F	White	15,199 r. July, 1960 Feb., 1967	Nitrogen Mustard: Sept., 1967.	40 yrs. Oct., 1967	89 months (7 yrs., 5 months)	86 months (7 years, 2 months)	10 months
IV	8	Cervical and Axillary Nodes. "paragranuloma"	April, 1949	9 yrs.	M	White	27,025 r. Aug., 1949 Aug., 1965	Cortisone: April, 1949. Nitrogen Mustard: August, 1966.	? Nov., 1967	223 months (18 yrs., 7 months)	219 months (18 yrs., 3 months)	? (2 yrs.?)
V	1	Cervical and Axillary Nodes. Cell type ?	July, 1962	25 yrs.	M	White	? July, 1962? Aug., 1963	None	26 yrs. Oct., 1963	15 months	?	2 months
VI	10	Left Supraclavicular Node. Nodular sclerosis	June, 1955	38 yrs.	F	White	11,675 r. June, 1955 June, 1960?	Nitrogen Mustard: ? Chlorambucil: ?	43 yrs. April, 1960	58 months (4 yrs., 10 months)	58 months (4 yrs., 10 months)	?
VII	2	Cervical Node. Type ?	?	30 yrs.	M	?	11,100 r. + 1959? 1967?	Chlorambucil: 1959. HN ₂ : Feb., 1965.	38 yrs. Sept., 1967	?	?	?
VIII	11	Right Supraclavicular Node Biopsy. "granuloma"	Feb., 1953	36 yrs.	M	White	5,840 r. April, 1956 March, 1957	HN ₂ : April, 1960.	44 yrs. July, 1960	88 months (7 yrs., 4 months)	51 months (4 yrs., 3 months)	39 months
IX	12	Left Supraclavicular Node. "granuloma/mixed cell"	Oct., 1966	20 yrs.	M	Caucasian	6,800 r. Oct., 1966 June, 1967	Prednisone: June, 1967.	22 yrs. Mar., 1968	17 months (1 yr., 5 months)	17 months (1 yr., 5 months)	9 months
X	13	Mediastinal Node. Type ?	Dec., 1950	26 yrs.	F	Caucasian	19,800 r. Dec., 1950 Oct., 1953	None	29 yrs. July, 1954	44 months (3 yrs., 8 months)	44 months (3 yrs., 8 months)	9 months

Hodgkin's disease terminating in acute leukemia.

COMMENT: Mr. R. Z. H.'s initial diagnosis, that is, a tumorous mass arising from around his lumbar vertebra, was diagnosed as Hodgkin's disease. However, because no typical Reed-Sternberg cells were seen, the diagnosis was in question. Consulting pathologists' reports were obtained from the University of Southern California and their conclusions are as follows. It was concluded that the tissue sections from the spinal canal were not Hodgkin's disease. Several cells morphologically very closely resembling Reed-Sternberg cells were seen but the general cellular environment did not fit any of the subtypes of Hodgkin's disease. There was a diversity of opinion as to what the actual disease process was at that time. One of the consulting pathologists felt that this patient would fall into an unusual group of lymphoproliferative disorders that had morphologic features suggesting plasma cell differentiation. Another consultant's opinion was that the whole disease process was some form of primitive granulocyte proliferation.

Initially, this case started out as an unusual, but apparently fairly clear-cut, problem of Hodgkin's disease terminating in an acute leukemia problem. As discussed above, this has been reported in the past, though very infrequently. As things developed with the pathological material being viewed by different pathologists, the clear-cut picture became quite unclear. To me, probably the most important aspect of the case was that a solid mass of neoplasia apparently in some way differentiated into a leukemic blood picture. I am not aware of acute myeloblastic leukemia (or monoblastic) originating in this fashion. Certainly, plasma cell disorders have been shown to develop into a leukemic phase. This patient's blood picture terminally did not, to me, look like that of a plasma cell leukemia in that the blast cells were quite large with large immature appearing nuclei and very prominent nucleoli. No Auer bodies were seen, however. A diagnosis of typical myeloma could not be made from this patient's pathological material, at least no clumps of immature appearing plasma cells were seen. He had no myeloma spike on his electrophoresis. The only

lytic lesion was a small isolated lesion noted in his pelvis. Perhaps in the future, with more detailed means of identification of cell lines, problems such as that of Mr. R. Z. H. can be more accurately categorized. The primary result of such categorization would be, of course, ultimate patient benefit. Perhaps a more specific identification of Mr. R. Z. H.'s initial spinal canal neoplasm would have resulted in the clinical decision of no irradiation since (hypothetically speaking) irradiation had been shown to convert or accelerate this specific neoplasm to an even more aggressive and lethal one.

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ELECTROCARDIOGRAM

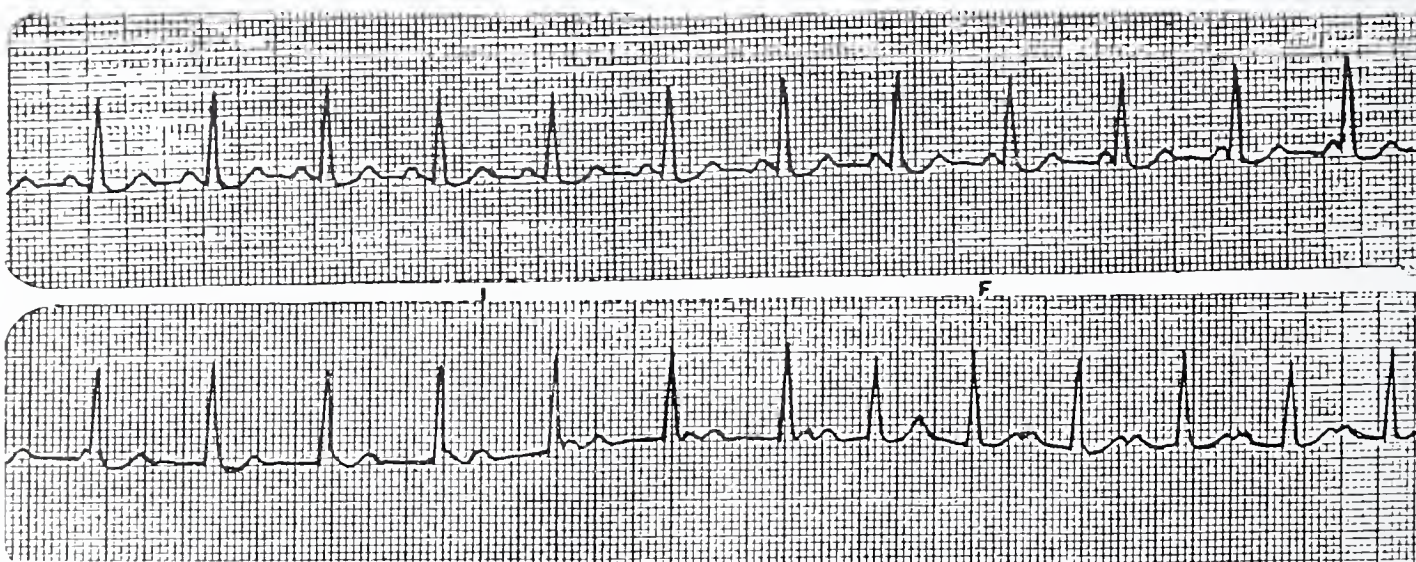
OF THE MONTH



The Department of Cardiology, University of Arkansas Medical Center

(See answer on page 204)

UAMC# 34 55 76 L.H. 20-year-old white female post gunshot wound to face. January 14, 1974.



David E. Smith, M.D., Cardiology Fellow
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Office Orthopaedics

Common Conditions of the Lower Limb in Infancy and Childhood

H. Austin Grimes, M.D.*

This discussion will be limited primarily to common conditions seen in the average family practice office and will be limited in its scope. The conditions to be considered are congenital dislocating hips, anteversion of the hips, genu valgus (knock-knee deformity), genu varus (bow leg deformity), genu recurvatum, internal tibial torsion, external tibial torsion, heel valgus, pes planus, metatarsus adductus and varus, and club feet.

The examination consists primarily of observation of the infant or child in the supine and prone position as well as sitting, and observation of their gait. Palpation, measurement of leg lengths and circumferential measurement of abnormally shaped limbs, and evaluation of range of motion should be carried out on the infant or child. The normal alignment of the leg supine is anterior superior iliac spine, mid patella, and second toe. When standing the pelvis should be level and a plumb bob from the C7 (cervical prominence) should strike the mid line at the gluteal crease. The knee should be approximated and, ideally, the medial malleoli should touch with the heel cord perpendicular to the floor. Sitting, the child's knee and ankle joints should be in the same plane when extended and flexed.

The examination differs somewhat in different age groups. The groups are simplified from zero to twelve months, one year to six years, and six years to twelve years. In the zero to twelve months age group, the so-called prewalkers, ob-

servation of the limbs for asymmetry and palpation of the bones for looseness of the ligaments about the ankles, knees, and hips is carried out with the infant lying on his back with his hips and knees flexed to 90 degrees. An attempt is made to abduct the hips and if asymmetry is noted, then the suspicion of a dislocated hip might be in evidence. It is suggested when limitation of abduction on either side is present, or when it is bilateral, then the dislocation may be complete. In the infant, look for asymmetric gluteal folds indicating shortening of the dislocated hip with telescoping of the skin. Ortolani's sign is a palpable, and occasionally, audible click over the subluxing or dislocating hip as the head returns to the socket or rides over the rim of the acetabulum. In the six-year-old age group there will be an obvious gait deformity in which there is a lurch to the affected side and the entire center of gravity is shifted markedly to the lateral of the center line and the upper torso tends to fall backward over the posterior of the center of gravity in order to stabilize the hip. The leg will frequently be unequal when measured from the anterior superior iliac spine to the tip of the medial malleoli. I usually take two or three of these measurements and average them in order to ascertain if there is a true discrepancy. In the twelve-year-old age group the true full dislocation is more obvious. The gait has been well established and the lurch and positive Trendelenberg sign is evident and more easily detected. The Trendelenberg is performed with the patient standing on the af-

*P. O. Box 5270, Little Rock, Arkansas 72205.

affected limb or the one that is suspected to be dislocated and the good leg or opposite leg is flexed at the hip and flexed at the knee. The pelvis should tilt upward on the affected side on which the child is standing due to weakness or paralyzed gluteus medius, which is the abductor of the hip and would stabilize the pelvis if it were intact.

Calve-Perthes disease or simply Perthes disease of the hip is usually found in the child near four years of age and is characterized by an antalgic gait. In the early part of the disease the child may not complain of hip pain at all, but simply complain of pain in the knee which has been referred from the hip. X-ray examination is important in the AP and frog lateral positions bilaterally. Boys are more often affected by this disease than girls, but it does occur in females as well. In the older age group, six to twelve years, established Perthes disease frequently results in unequal leg lengths. Although the Perthes disease may be burned out in the older age group it is well to continue to follow them until growth is complete. It should be explained to the parents that participation in contact sports for the child with this disease after it is completed should be considered on an individual basis, but in general participation in contact sports is discouraged.

Anteversion of the Hips. The child is examined supine with the hips and knees flexed in the zero to twelve months age group unless you are able to get the child to sit up. If he can sit then he may be examined with the legs dangling over the side of the table with the knees and hips flexed and the legs together at the knees. Internally rotate both legs so that the knees remain in close approximation and note how far the legs can be brought toward being parallel to the floor. The more nearly parallel to the floor the tibiae may be brought, the more anteversion is present. In the newborn there is a great deal of anteversion which rapidly corrects spontaneously. Generally about 60 degrees of anteversion is present in the newborn and by the time the child is six months of age about 45 degrees is present and gradually it decreases to about 30 to 35 degrees by the time the child is walking. If anteversion persists a pigeon toe gait will be evident. In the six-year age group anteversion has a fairly good prognosis if treated

early with conservative management. Examination is performed with the child in the prone position with the hips extended and the knees flexed at 90 degrees and internally rotated, or it may be performed with the child sitting, dangling the legs over the side of the table as you would with the younger child. A fairly good indicator in addition to pigeon toe gait is associated internal tibial torsion or metatarsus adductus. These deformities may occur concomitantly or individually, but should not be overlooked simply because the other is dominant. Pigeon toe gait is frequently accentuated on running and this should be a portion of the examination as well. In the one to six year age group the prognosis with conservative treatment, including bracing and shoe corrections, is fair to good depending on the degree of anteversion. In the six to twelve year age group the prognosis is fair to poor with conservative methods of treatment and if severe anteversion is present surgery will be required.

Internal tibial torsion may be associated with anteversion of the hip and the patient has a pigeon toe gait. In the infant with the child lying supine the feet are externally rotated normally. When he is relaxed the internal tibial torsion is apparent and the feet are turned in. Observation of the plane of the knee joint and plane of the ankle joint in extension and flexion will help determine if they fall in a parallel line. If necessary, a line may be drawn along the dorsum of the foot from the second toe in the middle of the foot and a line through the middle of the patella. These lines should fall in the same plane on flexion and extension. If internal rotation of the tibia is present, the foot points toward the midline with the knee directly ahead. It is found that the tip of the medial malleolus in relationship to the lateral malleolus is generally anterior by about one centimeter to a centimeter and one-half, but in internal tibial torsion, these may be in the same plane with the knee in the flexed or extended position. Internal tibial torsion which occurs at birth frequently spontaneously corrects itself by the age of six months. If it is still persistent at three to four months of age and apparently is not correcting, then perhaps treatment with bracing and night splints with the feet in external rotation should be instituted at this time. There is a good prog-

nosis in this age group. In the one to six year age group internal tibial torsion is more of a problem. Night braces for the toddler are indicated as it is very difficult to keep them on during the day. Depending on the size of the toddler corrective shoes are indicated as well. In the one to six year old age group the night splints may be alternated with corrective shoes as the child gets older. Frequently placed in the shoe is a Thomas heel, medial arch cookie, and occasionally a lateral sole wedge, but this varies with the treating physician. If the deformity persists in this age group it should be considered for more vigorous bracing and possible osteotomy. The prognosis in this age group is fair to good. In the six to twelve year group if internal tibial torsion has persisted to the degree that there is gross deformity, then surgical correction becomes a prime consideration.

External tibial torsion is of frequent concern to the mother or grandmother and no treatment is necessary and it usually spontaneously corrects. If it persists in the toddler age group to a moderate degree then consideration for corrective shoes might be in order or even night splints if the deformity is severe. In the six to twelve year age group treatment is generally surgical if the deformity is severe. Braces are less effective in this age group.

Genu recurvatum is associated with loose joints and is evident after the child has begun to stand. Usually a built up heel suffices in many cases to allow time for the ligaments to tighten sufficiently to not allow recurvatum to persist into the older age groups. However, if this is a loose jointed child this may persist into adulthood. The mother should be checked also for loose joints by placing the thumb along the flexor surface of the forearm. Loose joints or ligamentous laxity contributes to other deformities associated with anteversion of the hips, internal tibial torsion, genu valgus, genu recurvatum, pes planus, and heel valgus. As the child gets older the ligaments tend to tighten up somewhat, but usually he remains flat footed with some degree of heel valgus. In the six to twelve year age group if the genu recurvatum is severe then surgical correction might be a consideration. On occasions bracing may be used in conservative management prior to surgical consideration.

Genu Varus or Bow Leg Deformity. There may be physiological bowing noted between zero and twelve months of age which frequently spontaneously corrects. While standing the deformity is apparent and will require treatment. X-rays of the knees should be made to rule out Blount's disease, multiple epiphyseal dysplasia, or other afflictions with poor prognosis. Most of the bow leg deformities are of the "garden variety" and will correct with active treatment provided it is severe enough. When the child is standing with the medial malleoli approximated, if measurement between the knees exceeds 3 to 5 cm, then probably the child is going to require some form of shoe correction or bracing at night and naptime. In the one to six year age group the problem is more acute and will require more strenuous bracing. If the deformity is not corrected by the time the child is six years of age, most likely the bowing will persist and in order to correct it, surgery will be required or the deformity as it exists at this stage will have to be accepted by the parents.

Genu valgus or knock-knee deformity is fairly common in the zero to twelve month age group and usually corrects spontaneously. If it persists into the one to six year age group then treatment may or may not be indicated depending on whether or not the deformity is more than 6 cm. between the malleoli at the time the child is standing and walking with ease, usually two or three months after they have begun to walk. If these deformities are associated with other deformities such as internal rotation of the tibiae, an A-frame brace might be considered. The prognosis is good in these cases up to six years of age even with braces. The prognosis after six years of age is guarded in regard to use of shoe corrections, bracing, and most likely if the genu valgus is more than 10 cm. between the medial malleoli with the knees approximated then surgery will be indicated in order to correct this deformity.

Pes Planus or flat feet is a very common deformity and the philosophy of treatment bears strongly on the method of management. Some physicians believe that all flat feet should be treated vigorously. Other go to the other extreme and believe that none should be treated. In these extremes of view, there is a treatment period and a philosophy which I would like to

impairment. In the zero to twelve month age group the feet are rather flat with baby fat and it is difficult to tell whether the child is flat footed or not. However, once the child is able to stand and ligamentous laxity is exhibited, I feel a Thomas heel and medial arch cookie are indicated. These are placed in high top shoes simply because the foot tends to be pushed out of the shoe in a low quarter shoe. The high top does not contribute to the stability of the ankle as would be suspected. It mainly keeps the shoe on the foot. The feet are maintained in high top shoes until the child is about two and one-half years of age or until the foot is sufficiently large that any corrections added to the shoe would not force the foot out of the shoe. An effort is made to get all the deformities corrected or shoe corrections added and bracing done prior to school age because of the stigma of unusual foot gear or braces as well as the opportunity to correct these during the rapid growth period. In the six to twelve year age group if the feet are not painful and they are very flat, then I usually discontinue all shoe corrections and allow the child to wear normal shoes.

Metatarsus varus and adductus of the forefoot is frequently associated with a pigeon toe gait and represents a tight joint deformity which will in the zero to twelve month age group require cast correction when it is severe and very tight and the forefoot will not correct to the neutral position. Usually internal tibial torsion will be in association and reverse last prewalker shoes are applied on a Denis Browne or Fillauer night splint to be worn both night and naptime to correct this deformity. Caution must be used not to over-correct the forefoot or you will break down the arch and get a flat foot. Metatarsus adductus persisting in the one to six year age group is going to require more vigorous treatment with reverse last shoes in the walking stage and possibly surgery. Surgery is less effective in treating this deformity than the shoe corrections and casting in the early stages. In the six to twelve year age group the chance of getting a good result is markedly reduced with or without shoes and with or without surgery because

of the persistence of bony abnormalities with the tight ligamentous structures.

Club foot deformity, obvious at the time of birth, should be vigorously treated from this moment on with cast correction. After correction has been obtained then corrective shoes with bracing, especially night bracing, is mandatory throughout the growth period or until about six years of age and then some type of shoe correction and close follow-up must be maintained until the child has completed growth. Other deformities associated with club foot are metatarsus varus, heel varus, equinus of the foot, and internal tibial torsion. The parents should be informed the child will require special shoes and warn them the condition will be a problem and frequently will result in unequal foot sizes depending on whether the condition is unilateral or bilateral and the condition will be passed on from generation to generation.

DISCUSSION

There are borderline cases of normal and slight deformities which need continuation of observation (three or four month intervals) and reassurance to the parents. It is better to have a child followed longer than necessary than to dismiss a child as borderline normal and have the deformity worsen without follow up examination. Granted, there are many instances of over-treatment, but this is usually determined in retrospect. In my experience the deformities are more often passed off as "will cure itself" wind up in another physician's office simply because the first physician did not show enough concern, for whatever reason, and failed to reassure the parents. It is wiser to reschedule another visit in three or four months and carefully examine the child again. A family history of foot and leg deformities often underlies the parents concern, therefore, listen to the grandmother too. In the six to twelve year old age group examination periods are extended to six, nine, and twelve month intervals depending on the severity of the deformity and the type of treatment utilized. Ideally most deformities are followed until growth is established.





Bat Rabies in Arkansas

Harvie R. Ellis, DVM*

In 1953, the first insectivorous bat with rabies in the United States was reported from Florida. Since the first reported case many bats have been examined and found to be positive for rabies in almost every state in the United States.

On August 17, 1961, a bat bit a woman in Little Rock, Arkansas, and upon being examined by the Health Department Laboratory it was found positive for rabies. This was the first human exposure to the bite of a rabid bat ever recorded in Arkansas. The family physician administered the Pasteur Treatment to the individual without any complications.

Since this eventful date on August 17, 1961, about 89 bats in Arkansas have been diagnosed as having rabies by use of the fluorescent antibody technique. During 1973 there were seven cases of rabies in bats in Arkansas with a number of human exposures. A complicated rabies problem can land on a person's doorstep in a matter of minutes any day. For example, two cases published by the Center for Disease Control of the U. S. Department of Health, Education, and Welfare in 1973 described such a situation.

Case No. 1: On September 22, 1973 a 26-year-old white male died of rabies in a Lexington, Kentucky, hospital 15 days after onset of illness. The man had been bitten on the ear by a bat, which subsequently escaped. He did not seek medical attention. Headache, sore throat, anorexia, fever, difficulty in swallowing, confusion, spasmodic tremors, agitation, pharyngeal paralysis, drooling of oral secretions and coma are some of the symptoms he experienced during his illness. At one period during his illness, stimulated precipitated spasms with spontaneous flexion of all extremities occurred.

Case No. 2: On April 10, 1973, a 14-year-old boy netted 3 bats at a neighborhood church and took them to his house. These bats were adopted by his younger brother and two sisters and were kept in separate aquariums or shoe boxes. On April 30 one of the bats died and the incident was reported to the County Health Department the next day. The bat was laboratory positive for rabies. A total of five children received the post-exposure rabies immunization and residents in the area were alerted. These episodes certainly emphasize the potential health hazards of wildlife pets.

Three incidents have occurred in Arkansas in the past few weeks in which individuals were bitten by bats.

Incident No. 1: On June 3, 1974, in the Thornburg community, Perry County, Arkansas, a bat flew down after dark and bit a housewife on the neck and escaped. The woman contacted the Arkansas Department of Health and her family physician and received the post-exposure rabies treatment.

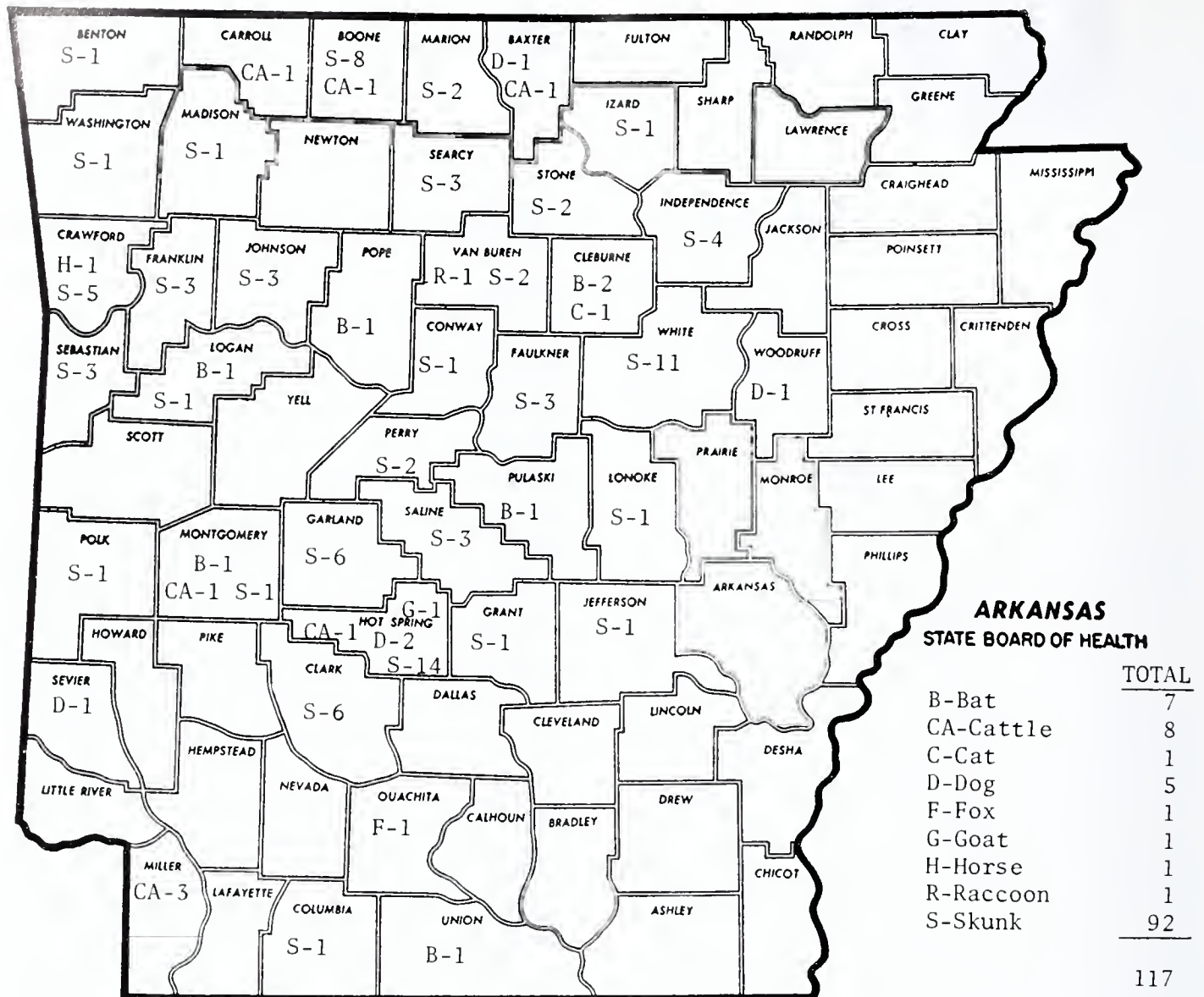
Incident No. 2: On June 6, 1974, in Lonoke, Arkansas, a man was standing in his carport after dark, a bat flew down and bit him on the face and escaped. The next day, the man contacted the Arkansas Department of Health and family physician for medical attention. The post-exposure treatment for rabies was started without delay.

The circumstances in connection with the third incident were not so complicated. In Newport, Arkansas, a bat flew down and bit a man on the foot. Fortunately, he was able to capture the bat and sent it to the laboratory where it was found to be negative for rabies.

Anti-rabies treatment is recommended for bat bites in human in situations where the bat

*Director, Division of Veterinary Public Health, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

RABIES IN ARKANSAS - 1973



escapes, or if for other reasons the bat cannot be examined in the laboratory by fluorescent antibody technique. The current recommendations for just what constitutes adequate post-exposure treatment for human exposures to rabid or suspected rabid animals has been modified by the World Health Organization Expert Committee on Rabies.

The present thinking recommends complete rabies prophylaxis which consists of anti-rabies serum and 21 doses of duck-embryo rabies vaccine. In addition, to insure the production and maintenance of high levels of serum-neutralizing antibodies, booster doses should be given in all cases at 10, 20 and 90 days following the last daily dose of vaccine. Booster doses are imperative when combined serum-vaccine treatment is employed, regardless of the vaccine or schedule used.

Human exposures to rabies that involve some species of wildlife are usually much more complicated to manage than those produced by pet animals. There is no observation and confinement period recommended for wild animals. The only safe method in the management of human exposure to wild animal bites is to sacrifice the animal and submit the head for laboratory examination using the fluorescent antibody technique.

The Division of Veterinary Public Health, Arkansas Department of Health, Little Rock, Arkansas, is prepared, upon request, to assist in the management and evaluation of animal bite exposures that occur in Arkansas.

The map of Arkansas provides information on the distribution of animal rabies in the state during 1973.



EDITORIAL

Haemopoietic Stem Cells

Alfred Kahn, Jr., M.D.

The haemopoietic stem cells are the subject of a series of papers which have collected in a Ciba Symposium under the Chairmanship of J. F. Loutit.

The first paper is by J. M. Yoffey, who in abstracting his article, makes the rather surprising statement to the readers of older texts, namely, that in normal animals with mature marrow there is no single stem cell. Instead, there is a stem cell compartment which contains two types of cells — small lymphocytes which account for 80-90% of the cells and transitional cells which are described as a spectrum of cells; they vary in size and in their staining capacity with dyes. In the lymphocyte-transitional cell compartment, the author diagrams the small lymphocytes as giving rise to transitional cells and vice versa. The small lymphocyte may go via a pale transitional cell type and a basophilic stage to a blast cell. Yoffey indicates that there may not be complete easy interchangeability of every lymphocyte into a stem cell — but the point is the potential is there in many. Yoffey used anoxia as a stimulus in studying the lymphocyte-transitional cell compartment. The anoxic state caused undifferentiated stem cells to migrate into the erythropoietic compartment. The haemopoietic stem cells diminish during anoxia and there is a rebound increase at the end of the anoxic period. Of special interest in anoxia experiments is the fact that the small lymphocytes decreased to a marked degree. The lymphocytes, in turn, form transitional cells which in turn form the proerythroblasts. The author comments that colony formation units exist in marrow; some colonies are active and can be so

moved by radio-active uptake; others are inactive or non-proliferating; whether the colony forming units are small lymphocytes or transitional cells seems unclear.

Dicke Van Noord, Maat Schaefer, and Van Bakkum reported on their attempts at morphologically identifying haemopoietic stem cells. They studied a culture of colony forming units. They found what they believe to be a stem cell which was distinct from the small lymphocyte. The stem cells in mice, monkeys, and humans appear similar. The cell they describe is small and looks somewhat like a lymphocyte but it is different when carefully studied microscopically. They disagree with Yoffey that the small cell is a lymphocyte.

Thomas used radiation as a tool to study stem cells. He irradiated mice. The lethally irradiated mice were given cell suspensions. Subsequent studies indicated that the change in proliferative capacity are related to only one group of cells which the author says are intermediate in form between generalized blast cells and small lymphocytes.

C. Rosse presented a paper concerning precursor cells to erythroblasts and to small lymphocyte of bone marrow. He found that the daughter cells of transitional cells may produce another transitional cell or a small lymphocyte. The stem cell is a precursor to any erythropoietin responsive cell. The author speculates that the small lymphocyte may so to speak be a variable outflow or overflow which permits the precursor compartment the right size when there are dif-

ferent types of stimulation—resulting in different states of stem cell activity.

Metcalf and Moore did a study on the regulation of growth and differentiation in haemopoietic colonies growing in agar. They state that progenitor cells of granulocytes and lymphocytes can grow and proliferate in agar cultures. This occurs under a colony stimulating factor—that stimulates both lymphocytes and monocytes. Their studies indicate both lymphocytes and monocytes share a common ancestor.

McCulloch, Gregory and Till reviewed their work on cellular communication early in haemopoietic differentiation. They postulate two categories of progenitor cells; the first may form red cells, white cells or platelets and may also renew themselves. The second group are committed stems which are the children of the pluripotent potent stem cell; these cells have limited powers of differentiation and limited ability for self renewal. The authors state that to keep the various cells in balance there has to be some communication between the cell groups. Some data suggest that there are managerial cells present. Other studies indicate genes may affect regulatory processes. They also have considered a material known as CSA for colony stimulating activity as a chemical mediator in this context.

The control of granulopoiesis by Stohlman, Quesenberry, Niskanen, Morley, Tyler, Rickard, Symann, Monette and Howard. They postulate that there is a serum factor capable of differentiating the committed myeloid stem cell or colony forming cell into the myeloblast compartment. This colony stimulating factor is apparently not identical with a leukocyte releasing factor which would cause the release of mature cells into the blood stream. The colony stimulating factor can be found in many body tissues.

The regulation of thrombopoiesis appears to be related to a factor known as thrombopoietin according to Shreiner and Levin. Thrombopoietin may act, the authors state, by speeding up the development of megakaryocytes or by stimulating the stem cell. The manufacture of platelets is apparently a feedback mechanism in which the level of circulating platelets determine the amount of platelet formation.

Of considerable interest in this symposium is an article entitled "Aging, Haemopoietic Stem

Cells and Immunity" by Micklem, Ogden and Payne. This is an area of particular interest to the general field of medicine and articles about this subject are occasionally seen in the lay press. Using mice, the authors report a decrease in immunologic ability with aging; both 19S and 7S antibodies are decreased. The question is why? And one might wonder parenthetically is this a cause of the rising rate of malignancy with aging. Micklem, et al., did not really find any explanations using mice. They did conclude that mice who have lived just 1/3 of their life span show an impairment in forming 7S antibodies. It is of further interest that stem cells taken from old mice can produce functional cells in young mice; bone marrow from young mice does not improve the immune reaction if injected into older mice.

Some knowledge of blood disorders is necessary for the practice of any field of medicine. This symposium reviews some of the areas of hematology that the practicing physician seldom considers, and yet this is a fundamental area—causes of leukocytosis, leukopenia, anemia, etc.



ANSWER—Electrocardiogram of the Month

Isarhythmic AV Dissociation.

The ventricle is being driven by an accelerated idioventricular focus at a rate very slightly faster than that of the SA node. The idioventricular beats "walk out of" the sinus rhythm, giving rise to AV dissociation due to an accelerated ventricular pacemaker. These rhythms frequently reflect increased ventricular irritability. They are not infrequently seen during the course of an acute M.I., and they ordinarily do not require treatment other than observation, unless the rate becomes prohibitive.

MEDICINE IN THE



THE MONTH IN WASHINGTON

Congress's on-again-off-again attempt to write a national health insurance law are very much off again — so far off that most observers believe there is no chance whatsoever for the 93rd Congress to go down in history as the author of mandated health insurance for all.

The method of financing NHI was again the stumbling block, cutting the House Ways and Means Committee down the middle in a 12 to 12 vote (a tie vote defeats an amendment) and thus scuttled a patchwork proposal by Chairman Mills that seemed to many likely to win Committee passage.

The dramatic tie vote came about the morning of Tuesday, August 20, after the Committee had been called to order by Chairman Mills with the admonishment, "We need to work awfully hard."

Staff began to explain the draft compromise point by point in routine fashion to the Committee when Rep. Joel T. Broyhill (R.-Va.) said he believed the Committee should be given the opportunity to vote on alternate methods of financing NHI (as opposed to the Social Security payroll tax) such as the tax credit idea in the AMA Medicredit plan. Mills stalled Broyhill off until the financing section of the compromise regarding mandated employer coverage was completed. The Chairman was about to go on, when Broyhill again reminded Mills that he wanted a vote on his amendment. The AMA tax credit approach would be voluntary and consistent with the free enterprise system, Broyhill said.

The first roll call vote of the Committee defeated the Broyhill proposal 11 to 10. One member — Rep. Bill Archer (R.-Texas) — changed his vote from "present" to "aye" and the motion was tied. Rep. Charles Chamberlain (R.-Mich.) walked in and the proposal was ahead 12-11. However, Rep. Herman Schneebelo (R.-Pa.) showed up to cast a "no" vote and the tie 12-12 tally defeated the Broyhill proposal.

Though not apparent at the time, this was the beginning of the end. Rep. Omar Burleson (D.-Texas) lost 13-12 on his bid to substitute the financing proposed by the health insurance industry's NHI plan. The crusher came at the afternoon session when the Committee approved 11 to 7 a motion to make voluntary rather than mandatory the compromise provision for the poor and the self-employed. This was a drastic setback for Mills who angrily adjourned the hearings until the next day.

The following morning shortly after the Committee had convened, Chairman Mills threw up his hands, saying: "I've never tried harder on anything in my life. But we don't have it. I'm not going to go before the House with a NHI bill approved by any 13-12 vote." He said the staff should try to figure out a different approach, but indicated he believed chances of reaching a future agreement on NHI were dim.

The forced abandonment of his compromise plan was a bitter defeat for Mills and for the Administration which had been working closely with the Chairman to steer a measure through the Committee. President Ford had urged Congress to give NHI top priority this year.

The up and down fortunes of NHI, which appeared to have a bright chance of passage following Ford's plea and Mills' determined push for a compromise, have now slumped to the point where only some drastic intervention by President Ford could save the measure for this year.

NOTE: Votes for the Medicredit financing plan came from Democrat Representatives Phil Landrum (Ga.), Richard Fulton (Tenn.), Omar Burleson (Texas), Sam Gibbons (Fla.), and Joe Waggonner (La.). On the GOP side, the pro-Medicredit votes were Representatives Broyhill (Va.), Jerry Pettis (Cal.), John Duncan (Tenn.), Donald Brotzman (Colo.), Donald Clancy (Ohio), Bill Archer (Texas), and Charles Chamberlain (Mich.).

* * * *

Self-employed physicians are about to receive some cheery news from Washington.

The House and Senate have passed and sent to the White House a liberalization of the Keogh law providing tax deferrals on retirement savings of self-employed people.

This means that physicians in this category can immediately start setting aside more money subject to tax deductions in qualified retirement programs. The bill's Keogh plan arrangement is retroactive to July 1, 1974.

There is no threat of a Presidential veto to cast any shadow on the legislation becoming law.

The bill substantially boosts the savings subject to tax deductions. The present Keogh plan allows the self-employed to set aside tax free up to 10 percent of their annual income with a \$2,500 a year maximum. The new law will allow 15 percent of earned income not to exceed \$7,500 a year.

House and Senate conferees after months of work finally agreed on all provisions of a sweeping pension reform bill that contains the Keogh provision. The measure had earlier swept through both House and Senate with only minor opposition to the Keogh provisions.

Organized labor had fought the liberalization as a loophole for wealthier people, but many of labor's staunchest backers, including Rep. Martha Griffiths (D.-Mich.), disputed labor's stand and supported the provision.

The liberalization capped a long fight by the American Medical Association for tax treatment of the self-employed physicians that would give them the same tax incentives for retirement savings as are now present in most corporate pension plans.

The bill also contains a relatively minor restriction on corporation pension plans that would affect so-called professional corporations that have been gaining favor with many physicians in recent years because of the more attractive retirement tax treatment. Tax deferrals will not be allowed on savings that would exceed a pension that brings in more than 75 percent of highest earnings over a three-year period with a maximum potential retirement income of \$75,000

the limit. A "grandfather clause" exempts current plans that exceed this standard.

The new Keogh provisions plus a new Keogh-type plan for non-self-employed not covered by company pensions is expected to cost the government about \$500 million a year in lost revenues.

In urging approval of the plan, Rep. Al Ullman (D.-Ore.), second ranking Democrat on the House Ways and Means Committee, told the House that "what we have to do is to bring into balance as much as we can the tax treatment for the self-employed as compared to the corporate community."

* * * *

Retired military physicians may now accept positions as active physicians with the Defense Department without any loss of their retired pay. Defense hopes the exception to previous Civil Service Commission standards will induce retired military physicians to go to work for the Pentagon as civilian employees to help ease the shortage caused by the end of the military "doctor draft."

* * * *

The Senate Labor and Education Committee has approved a revolutionary medical education bill that would require all medical graduates to serve in shortage areas and compel relicensing of all physicians.

The measure, written by the Health Subcommittee headed by Sen. Edward Kennedy (D.-Mass.), carries almost \$1 billion in federal aid for medical and other health schools over the next five years.

In addition to the controversial mandatory service and relicensing provisions, the bill gives the federal government power to allocate and limit postgraduate training positions for physicians. Designed to curb reliance on foreign medical graduates and to increase the numbers of primary care physicians, the disputed provision also requires the Secretary of Health, Education and Welfare to limit the number of postgraduate physician training positions to no more than 10 percent above the number of domestic medical and osteopathic school graduates that year. The HEW Secretary would assign the total number of certified positions established to the various

categories of specialty and subspecialty practice of medicine.

The Association of American Medical Colleges and the AMA were sharply critical of these provisions. The legislation now before the House Health Subcommittee is not expected to contain them. Eventual fate may hinge on the outcome of a House-Senate conference.

* * * *

The government issued final regulations defining the conditions under which Medicare will help pay for services provided by independent physical therapists and limited services by chiropractors.

Under the regulations, carrying out the Medicare amendments law of last year, covered chiropractic services are limited to manual manipulation of the spine to correct "subluxations" which can be demonstrated by x-ray. Also, chiropractors must meet strict educational and professional requirements before their services can be reimbursed under the program.

The cost of x-ray will not be covered. HEW said the x-ray must demonstrate "at least . . . a malpositioning of a vertebra" identifiable by any experienced x-ray reader.

* * * *

The American Medical Association has opposed legislation that would eliminate the authority of the Food and Drug Administration to control the kinds and amounts of ingredients in dietary supplements and other foods for dietary uses.

Appearing before the Senate Health Subcommittee, AMA officials noted that excessive use of vitamins can be harmful and is scientifically unwarranted. Combinations of vitamins should contain only those vitamins shown to be essential in human nutrition.

The witnesses were C. E. Butterworth, Jr., M.D., Chairman of the AMA's Council on Foods and Nutrition, and Vice Chairman Theodore Van Itallie, M.D. "There is no valid evidence to demonstrate that larger amounts of nutrients are beneficial under ordinary psychological conditions," said Dr. Butterworth.

Recent FDA regulations limiting the in-

clusions of certain vitamins and/or minerals in dietary supplements have aroused the wrath of food-vitamin faddists and prompted introduction of legislation to overturn the FDA's actions.

Restriction of FDA's powers in this field, the AMA officials told the Subcommittee, "would permit an unchecked proliferation of health deception and economic fraud."

* * * *

Less than half of the nation's physicians are now accepting assignment for all of their Medicare patients, according to the latest government figures. Deputy Assistant HEW Secretary Stuart Altman revealed the decline in testimony before the House Ways and Means Committee on national health insurance. HEW Secretary Caspar Weinberger later told the Committee a NHI program should carry inducements for physicians to accept the assignment route, but opposed making it mandatory.

* * * *

President Ford met with American Medical Association officials at the White House the end of August.

They discussed prospects for national health insurance in the current session of Congress and an AMA delegation's recent visit to China.

Those who attended the White House meeting included AMA President Malcolm Todd, M.D.; Richard C. Palmer, M.D., Chairman of the Board of Trustees; Russell Roth, M.D., Immediate Past President; Max H. Parrott, M.D., President Elect; James Sammons, M.D., Executive Vice President Designate, and Joe Miller, Assistant Executive Vice President.

* * *

This Month In Washington incorrectly reported (July) that the public utility type provision, defeated by an 8-1 vote by the House Health Subcommittee, covered both institutions and physicians' fees. The Administration's Comprehensive Health Planning bill, which specifically called for regulation of fees of individual practitioners, was never seriously considered by the Subcommittee, according to a protest from Rep. William Roy, M.D. (D-Kan.).

MINUTES

BOARD OF DIRECTORS

ARKANSAS FOUNDATION FOR MEDICAL CARE

The Board of Directors of the Arkansas Foundation for Medical Care met at 3:00 P.M. on Sunday, September 15, 1974, in the Sam Peck Hotel, Little Rock. Board members present were: Long, Orr, Kirkley, J. Bell, Pat Bell, Inman, Burge, Jameson, Duzan, Kemp, Harris, McCrary, Clark, Kolb, Kirby, Henry, and Koenig. Others present were Shuffield, Saltzman, Watson, Jansen, Fowler, Hyatt, Verser, Mitchell, Kutait, Mr. Warren, Mr. Harris, Mr. McIntosh, Mr. Schaefer, Miss Richmond and Mr. Waters.

Upon motion of Kirkley, the Board approved actions of the "committee of the whole" taken on July 21, 1974.

Robert McCrary, Chairman of the Review Committee, reported that he had made arrangements to handle correspondence of the committee on a local level with paid secretarial assistance.

Mr. Warren discussed the committee members' vulnerability to libel and slander suits and recommended that contracts be worked out with the insurance companies to provide protection for the committee members and the Foundation. Upon motion of Koenig, the Board so voted.

Dr. McCrary advised the Board that the committee would take no further action until this matter had been resolved.

The Board voted to amend the By-Laws to make the Secretary and Treasurer members of the Board of Directors.

Chairman Long reported to the Board on the appointment of two committees for the PSRO Planning Contract:

1. Committee on Planning and Development—Warren Murry, Chairman
2. Committee on Norms and Standards of Medical Care—Rhys Williams, Chairman

He outlined results of the initial meeting of the Planning and Development Committee held on September 11th.

Dr. Long introduced Bob Waters, Assistant to the Program Manager for the PSRO Planning Contract, who spoke briefly on the progress the Foundation is making on its Planning Contract and the prospects for conditional designation.

The meeting adjourned at 4:00 P.M.

APPROVED: C. C. Long, M.D.
President

BY-LAWS

of

ARKANSAS FOUNDATION FOR MEDICAL CARE

OCTOBER 1974

We, the Directors of the above entitled corporation, under the Arkansas Non-Profit Corporation Act, hereby adopt the following By-Laws for the government of said corporation, the regulation of its affairs, and the carrying on of its business.

ARTICLE I

Membership

1. *Classes of Membership:*

There shall be one class of membership in this corporation. In addition to the members referred to above, the Board of Directors may designate other persons who may take part in the projects to be carried out under the direction or control of the corporation, under such terms and conditions as the Board of Directors may determine.

2. *Qualifications of Members:*

Any physician, who is authorized by the statutes of the State of Arkansas to practice medicine or osteopathy in the State of Arkansas shall be eligible to apply for election as a Member in this corporation; provided, however, that the Board of Directors of this corporation shall have the right to refuse such application for membership, if in their sole discretion, they shall find that such physician shall not be of good moral character or in any other way be not qualified to practice medicine or osteopathy, or to have been guilty of unprofessional conduct or of conduct unbecoming a person licensed to practice medicine or osteopathy, or of conduct detrimental to the best interest of the public.

3. *Selection and Removal of Members:*

Any physician who desires to become a Member of the corporation shall complete and file such application for that purpose as may be required by the Board of Directors. Such application shall contain a provision whereby the applicant agrees to be bound by the By-Laws of the corporation and such rules and regulations as may be adopted by the corporation and agrees to be bound by the principles of medical ethics, as adopted by the Board of Directors. The Board of Directors of the corporation shall have the right to reprimand or to cancel or suspend from membership any Member who has been found by the Board of Directors to be guilty of violation

of the By-Laws or rules and regulations of this corporation or of said principles of medical ethics, or not be of good moral character or in any other way not qualified to practice medicine, or to have been guilty of unprofessional conduct or of conduct unbecoming a person licensed to practice medicine, or of conduct detrimental to the best interest of the public.

The Board of Directors shall be authorized to adopt such rules and regulations as it may deem reasonable for the processing of applications for Membership, and for the discipline of Members.

4. *Rights, Privileges and Obligations of Members:*

The Board of Directors may adopt such rules and regulations as it may deem proper, not inconsistent with these By-Laws, governing the rights, privileges and obligations of Members.

The privilege of being heard at the meetings of the Board of Directors shall be granted to Members subject to such limitations as the Board of Directors may determine.

5. *Dues and Assessments:*

Dues and Assessments, if any, to be charged to or imposed upon the Members of the corporation or other persons who may take part in any project of the corporation shall be determined by the Board of Directors.

6. *Voting Rights:*

A member shall be entitled to one vote on all propositions submitted to the members.

A member shall be entitled to vote by proxy and such proxies shall be counted in determining a quorum at all meetings.

7. *Interest in Property:*

None of the members of this corporation shall ever have any right to or interest in any of the property, real or personal of any kind or description, which is now or may in the future be owned and controlled by the corporation.

ARTICLE II

Meetings of the Members

1. *Annual Meetings:*

The annual meeting of Members of this corporation shall be held on the first day or the last day of the annual session of the Arkansas Medical Society.

2. *Special Meetings:*

A special meeting of the Members of this corporation may be called at any time by the

President, the Board of Directors, or by not less than one-third of such Members.

3. *Place of Meeting:*

Each annual meeting of the Members of the corporation shall be held at the same place designated as the place of meeting for the annual session for such year of the Arkansas Medical Society. The Board of Directors may designate any place, either within or without the State of Arkansas, as a place of meeting for any special meeting called by the Board of Directors. If no designation is made, or if a special meeting be otherwise called, the place of meeting shall be the registered office of the corporation in the State of Arkansas.

4. *Notice of Meeting:*

Written notice stating the place, day and hour of any special meeting of Members shall be delivered either personally or by mail, to each member, not less than 10 nor more than 50 days before the date of such meeting, by or at the direction of the President, or the Secretary, or the officers or persons calling the meeting. The purpose or purposes for which the special meeting is called shall be stated in the notice. If mailed, the notice of meeting shall be deemed to be delivered when deposited in the United States mail addressed to such member at his address as it appears on the records of the corporation, with postage thereon prepaid.

5. *Informal Action by Members:*

Any action required by law to be taken at a meeting of the members, or any action which may be taken at a meeting of such members, may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of such members entitled to vote with respect to the subject matter thereof.

6. *Quorum:*

Thirty percent of the membership shall constitute a quorum at any such meeting. If a quorum is not present at the meeting, a majority of the members present may adjourn the meeting from time to time without further notice.

7. *Voting:*

A majority of the members present at a meeting at which a quorum is present shall be necessary for the adoption of any matter to be voted upon by such members, unless a greater percentage is required by law or by these By-Laws.

ARTICLE III

Board of Directors

1. *General Powers:*

The affairs of this corporation shall be managed by its Board of Directors.

2. *Number, Tenure, and Qualifications:*

The Board of Directors shall be composed of 20 members who shall be elected by the members of this corporation residing in the respective director district and the secretary and the treasurer of the Foundation. There shall be 10 director districts which shall have the same geographical area as the 10 councilor districts of the Arkansas Medical Society.

At the first meeting of the members of this corporation after the adoption of this provision of the By-Laws of this corporation two directors of the corporation shall be selected from each of the 10 districts comprising the State of Arkansas. One director from each district shall be elected for one year and one director shall be elected for two years, thereafter at the annual meeting of the members of the corporation one director shall be elected to succeed the retiring director. Terms of the directors shall be a period of two years. Directors can be elected to succeed themselves. In the event of the retirement of a director by resignation, death, or otherwise the remaining directors shall elect a succeeding director from other physicians of the district from which the retiring director came, who shall serve until the next annual meeting of the members of this corporation. It shall not be necessary or a requirement for office that any director be a member of any medical society or dues paying organization.

3. *Regular Meetings:*

The regular annual meeting of the Board of Directors shall be held without other notice than this By-Law, immediately after, and at the same place as the annual meeting of the Members of the corporation. The Board of Directors may provide by resolution the time and place, either within or without the State of Arkansas, for the holding of additional regular meetings of the Board without other notices than such resolution.

4. *Special Meetings:*

Special meetings of the Board of Directors may be called by or at the request of the President or any two Directors. The person or persons authorized to call special meetings of the Board may fix any place, either within or without the

State of Arkansas, as the place for holding any such special meeting of the Board called by them.

5. *Notice:*

Notice of any special meeting of the Board of Directors shall be given at least two days previously thereto by written notice delivered personally or sent by mail or telegram to each Director at his address as shown by the records of the corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail in a sealed envelope so addressed, with postage thereon prepaid. If notice be given by telegram, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph company. The attendance of a Director at any meeting shall constitute a waiver of notice of such meeting, except where a Director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board need be specified in the notice or waiver of notice of such meeting, unless specifically required by law or by these By-Laws.

6. *Quorum:*

A majority of the Board of Directors shall constitute a quorum for the transaction of business at any meeting of the Board; but if less than a majority of the Directors are present at said meeting, a majority of the Directors present may adjourn the meeting from time to time without further notice.

7. *Voting:*

The act of a majority of the Directors present at a meeting at which a quorum is present shall be the act of the Board of Directors, unless the act of a greater number is required by law or by these By-Laws.

8. *Vacancies:*

Any vacancy occurring in the Board of Directors and any directorship to be filled by reason of an increase in the number of directors shall be filled by election by the Board of Directors. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office.

9. *Compensation:*

Directors as such shall not receive any stated salaries for their services, but by resolution of the Board of Directors reasonable compensation and

expenses of attendance, if any, may be allowed for attendance at regular or special meetings of the Board; but nothing herein contained shall be construed to preclude any Director from serving the corporation in any other capacity and receiving compensation therefor.

10. *Informal Action by Directors:*

Any action required by law to be taken at a meeting of Directors, or any action which may be taken at a meeting of Directors, may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the Directors.

11. *Removal of Directors:*

Any Director may be removed at any time, with or without cause, by a majority vote of the members at any annual meeting of the members or at any special meeting of the members called expressly for that purpose.

ARTICLE IV
Advisory Council

There shall be an advisory council, whose purpose shall be to advise and counsel with the officers and directors of this corporation on any matters which may be of proper concern or interest to the corporation. This council may include but need not be limited to persons from various organizations or groups who are especially involved or interested, either as providers or consumers, in the field of health care, in the State of Arkansas, and also other persons who, by reason of training and experience, may be qualified to provide valuable advice and assistance to the work of the corporation. The members of this council shall be elected by the Board of Directors, at the regular annual meeting of the Board of Directors, and shall serve for terms of one year, or until their successors shall have been duly elected and qualified. The number of the members of the advisory council shall be established by the Board of Directors.

ARTICLE V
Officers

1. *Officers:*

The officers of the corporation shall be a President, who shall also serve as Chairman of the Board of Directors, a Vice-Chairman of the Board of Directors, an Executive Vice-President, a Senior Vice-President, one or more other Vice-Presidents, a Secretary, a Treasurer, and such other officers as may be elected in accordance with the provisions of this Article. The relative

rank and authority of the three classifications of Vice-President shall be in the order in which they are named above. The Board of Directors may elect or appoint such other officers, including one or more assistant secretaries, one or more assistant treasurers, one or more project directors, and such other administrative officers as it may deem desirable, such other officers to have the authority and perform the duties prescribed from time to time by the Board of Directors. Any two or more offices may be held by the same person, except the offices of President and Secretary.

2. *Election and Term of Office:*

The officers of the corporation shall be elected annually by the Board of Directors at the regular annual meeting of the Board of Directors. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. New offices may be created and filled at any meeting of the Board of Directors. Each officer shall hold office until his successor shall have been duly elected and qualified.

3. *Removal:*

Any officer elected or appointed by the Board of Directors may be removed at any time, with or without cause, by the Board of Directors whenever in its judgment the best interests of the corporation would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the officer so removed.

4. *Vacancies:*

Any vacancy in any office because of death, resignation, removal, disqualification or otherwise, may be filled by the Board of Directors for the unexpired portion of the term.

5. *President:*

The President of the Foundation shall be elected by the Board of Directors from among those persons duly elected to and serving on the Board of Directors; and he may continue in this office only as long as he serves as a member of the Board of Directors. He shall serve as chairman of the Board of Directors and shall be the head of the corporation. He shall have general supervision over the business and affairs of the corporation. He shall preside at all meetings of the members and of the Board of Directors.

6. *Vice-Chairman of the Board of Directors:*

The Vice-Chairman of the Board of Directors shall be elected by the Board of Directors from those persons duly elected to and serving on the

Board of Directors; and he may continue in this office only as long as he serves as a member of the Board of Directors. In the absence of the President or in the event of his inability or refusal to act, the Vice-Chairman of the Board shall perform the duties of the President, and when so acting shall have all the powers of and be subject to all the restrictions upon the President. The Vice-Chairman of the Board shall perform such other duties as from time to time may be assigned to him by the President or by the Board of Directors.

7. *Treasurer:*

If required by the Board of Directors, the Treasurer shall give a bond for the faithful discharge of his duties in such sum and with such surety or sureties as the Board of Directors shall determine. He shall have charge and custody of and be responsible for all funds and securities of the corporation; receive and give receipts for moneys due and payable to the corporation from any source whatsoever, and deposit all such moneys in the name of the corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of these By-Laws; and in general perform all the duties incident to the office of Treasurer and such other duties as from time to time may be assigned to him by the President or by the Board of Directors.

The individual elected to the position of treasurer shall automatically become a member of the Board of Directors for the duration of his term as treasurer.

8. *Secretary:*

The Secretary shall keep the minutes of the meetings of the members and of the Board of Directors in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these By-Laws or as required by law; be custodian of the corporate records and of the seal of the corporation and see that the seal of the corporation is affixed to all documents, the execution of which on behalf of the corporation under its seal is duly authorized in accordance with the provisions of these By-Laws; keep a register of the post office address of each member which shall be furnished to the Secretary by such member; and in general perform all duties incident to the office of Secretary and such other duties as from time to time may be assigned to him by the President or by the Board of Directors.

The individual elected to the position of secretary shall automatically become a member of the Board of Directors for the duration of his term as secretary.

9. *Executive Vice-President:*

The office of Executive Vice-President shall be filled by the person who holds the office of Executive Vice-President (or such other title as may hereafter be given to that office) of the Arkansas Medical Society. Subject to the control of the President and of the Board of Directors, he shall in general direct and supervise the administration of the business and affairs of the corporation.

10. *Senior Vice-President:*

The Senior Vice-President shall, subject to the direction and control of the President, the Board of Directors, and the Executive Vice-President, be responsible for the administration and supervision of the business and affairs of the corporation.

11. *Other Vice-Presidents:*

The other Vice-Presidents shall perform such duties as from time to time may be assigned to them by the President, the Board of Directors, the Executive Vice-President, or the Senior Vice-President.

12. *Project Directors:*

Any Project Director shall serve under the general supervision and direction of his superior officers. He shall supervise the administration of such projects as may be assigned to him, and shall perform such other duties as may be delegated to him by the Board of Directors, the President, or his other superior officers.

13. *Assistant Treasurers and Assistant Secretaries:*

If required by the Board of Directors, the Assistant Treasurers shall give bonds for the faithful discharge of their duties in such sums and with such sureties as the Board of Directors shall determine. The Assistant Treasurers and Assistant Secretaries, in general, shall perform such duties as shall be assigned to them by the Treasurer or the Secretary or by the President or the Board of Directors.

ARTICLE VI Committees

1. *Committees of Directors:*

There shall be an Executive Committee, which shall include the President, and such other officers or members of the Board of Directors as may

be designated by the Board of Directors. The Board of Directors may delegate to such Executive Committee any of the powers of the Board of Directors when the Board of Directors is not in session; provided, however, that such delegation of authority to the Executive Committee shall not operate to relieve the Board of Directors, or any individual Director, of any responsibility imposed upon it or him by law.

2. Other Committees:

Other committees not having and exercising the authority of the Board of Directors in the management of the corporation may be appointed in any such manner as may be designated by a resolution adopted by a majority of the Directors present at a meeting at which a quorum is present. Unless otherwise provided in such resolution, members of such committees may be persons who are not members of the Board of Directors.

3. Term of Office:

The tenure of members of such committees shall be as provided by the Board of Directors in the resolution creating such committees.

4. Quorum:

Unless otherwise provided in the resolution of the Board of Directors designating a committee, a majority of the whole committee shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee.

5. Rules:

Each committee may adopt rules for its own government not inconsistent with these By-Laws or with rules adopted by the Board of Directors.

ARTICLE VII

Execution of Instruments

1. Execution of Instruments:

The President shall have power to execute on behalf and in the name of the corporation any deed, contract, bond, debenture, note or other obligations or evidences of indebtedness, or proxy, or other instrument requiring the signature of an officer of the corporation, except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the corporation. Unless so authorized, no officer, agent or employee shall have any power or authority to bind the corporation in any way, to pledge its credit, or to render it liable pecuniarily for any purpose or in any amount.

2. Checks and Endorsements:

All checks and drafts upon the funds to the credit of the corporation in any of its depositories shall be signed by such of its officers or agents as shall from time to time be determined by resolution of the Board of Directors which may provide for the use of facsimile signatures under specified conditions, and all notes, bills receivable, trade acceptances, drafts, and other evidences of indebtedness payable to the corporation shall, for the purpose of deposit, discount or collection, be endorsed by such officers or agents of the corporation or in such manner as shall from time to time be determined by resolution of the Board of Directors. In the absence of such determination by the Board of Directors, such instruments shall be signed by the Treasurer or an Assistant Treasurer and counter-signed by the President or a Vice-President of the corporation.

3. Deposits:

All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositories as the Board of Directors may select.

4. Gifts:

The Board of Directors may accept on behalf of the corporation any contribution, gift, bequest or devise for the general purposes or for any special purpose of the corporation.

ARTICLE VIII

Books and Records

The corporation shall keep correct and complete books and records of account and shall also keep minutes of the proceedings of its members, Board of Directors and committees having any of the authority of the Board of Directors, and shall keep at its registered or principal office a record giving the names and addresses of the members entitled to vote. All books and records of the corporation may be inspected by any member for any proper purpose at any reasonable time.

ARTICLE IX

Fiscal Year

The fiscal year of the corporation shall begin on the first day of January, and end on the last day of December in each year.

ARTICLE X

Corporate Seal

The corporate seal shall be in such form as shall be approved by resolution of the Board of

Directors. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise. The impression of the seal may be made and attested by either the Secretary or an Assistant Secretary for the authentication of contracts or other papers requiring the seal.

ARTICLE XI **Waiver of Notice**

Whenever any notice is required to be given to any member or director of this corporation under the provisions of the Arkansas Non-Profit Corporation Act or under the provisions of the Articles of Incorporation or by the By-Laws of the corporation, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

ARTICLE XII **Amendments to By-Laws**

These By-Laws may be amended at any annual meeting of the Members, or at any special meeting of the Members called for that purpose. These By-Laws may also be amended by the Board of Directors, by a vote of two-thirds of the total number of such Directors; provided, however, that the Directors shall not have the right to change or repeal any amendment hereto adopted by the Members. The Members shall have the right to amend or repeal any By-Law change made by the Board of Directors.

Family Medicine Program Growing

The family medicine training program of the University of Arkansas Medical School at Little Rock has become the second largest program in the school, University officials report.

Additionally, efforts to place medical students in training sessions working with family practitioners around the State are growing. A Federal grant was used to enable forty sophomores and two seniors to spend time working in the doctors' offices and hospitals across the State in April and May of this year.

Dr. Paul Wallick of Monticello, head of the program, said that about 30 participated in a similar program a year ago.

The Federal grant, which totaled \$22,329 in 1973-74 fiscal year, and will provide \$25,710 in the 1974-75 fiscal year for student expenses in the field, is a valuable addition to the curriculum provided by the medical school, according to Dr. Wallick.

The program permits young students to see how family physicians work before they "get indoctrinated" in later years of study by those promoting orientation into a medical specialty, Dr. Wallick stated.

In contrast to the idea that "the only way to practice medicine is in a large medical institution", Wallick said, the preceptorship program shows students that there can be a satisfactory practice in a small community, under proper medical conditions.





PERSONAL AND NEWS ITEMS

Doctor Named to Board

Dr. Glen F. Baker of Little Rock has been elected to the board of directors of the Union National Bank in that city.

Dr. Redman Appointed

Dr. John Redman of Little Rock has been named assistant dean of clinical affairs at the University of Arkansas School of Medicine. Dr. Redman has been associate professor and head of the division of urology at the school.

Physician Locates

Dr. Jabez Jackson, Jr., has joined the medical staff of Harris Hospital and Clinic in Newport practicing obstetrics and gynecology.

Dr. DeLany Relocates

Dr. Clarence L. DeLany, formerly of El Dorado, has joined the Fulton County Hospital staff as head of the Department of Radiology, in Salem.

Physician to Direct Fund Drive

Dr. Raymond P. Miller of Little Rock will head the joint United Negro College Fund—Philander Smith College fund drive this year in Arkansas. This year's goal is \$50,000.

Outstanding Young Men of America

Dr. John Dalie Wells of Fort Smith has been selected to appear in the annual biographical compilation "Outstanding Young Men of America". The annual award is sponsored by leading men's civic, service, and professional organizations in the United States.

Dr. Harrel Leaves Health Department

Dr. John A. Harrel, Jr., has resigned as Director of the State Health Department to become Director of Medical Affairs at DeKalb General Hospital in Atlanta, Georgia.

Physician Relocates

Dr. George W. Smiley, formerly the physician for the Department of Corrections at Cummins, Arkansas, is now associated in general practice with the Lake Village Clinic in Lake Village, Arkansas.

Dr. Price Honored for Service

Dr. John P. Price was recently honored at a reception by friends and community members at the University of Arkansas at Monticello. Dr. Price has practiced medicine in Monticello for forty years.

Dr. Nathaniel Rodgers is Speaker

Dr. Nathaniel L. Rodgers recently spoke on "How to Evaluate Genealogical Material" before the Texarkana USA Genealogical Society in Texarkana.

Dr. Harrison Guest Speaker

Dr. Jack Harrison of Texarkana was among guest speakers at a recent meeting of the Nurses Association of the American College of Obstetricians and Gynecologists in Texarkana.



THINGS TO COME

Physicians Seminar on Hypertension

The Arkansas Heart Association will sponsor a Physicians Seminar on the Diagnosis and Treatment of Hypertension, Sunday, December 1, 1974. The hour program will be held at the University of Arkansas Medical Center Auditorium in Little Rock, Arkansas. Guest speakers will be Edward D. Frolich, M.D., Professor of Medicine, University of Oklahoma Health Science Center, Oklahoma City, and William B. Kannel, M.D., Framingham Investigator, Framingham, Massachusetts.

For information on this program contact Mr. Don Thompson, Program Director, Arkansas Heart Association, Post Office Box 1610, Little Rock, Arkansas 72203.

International Pediatric Symposium

The International Pediatric Symposium will be held February 9-16, 1975, at the Jerusalem Academy of Medicine, Jerusalem, and Beilinson Hospital, Tel Aviv. Seminars are approved for 13 hours credit toward the American Medical Association's Category I, Physician's Recognition Award.

The Symposium is presented by the Mt. Sinai School of Medicine and Beth Israel Medical Center, in cooperation with the Tel Aviv University Faculty of Medicine, the Hebrew Uni-

versity—Hadassah Medical School, the Jerusalem Paediatric Association, and the Institute for Continuing Education.

For registration information write: The Institute for Continuing Education, Post Office Box 11083, Richmond, Virginia 23230.

Pediatric Behavior Management Conference

The Department of Pediatrics of the University of Miami School of Medicine will conduct a conference on Pediatric Behavior Management on February 21-22, 1975. The conference will be held at the Division of Continuing Medical Education, University of Miami School of Medicine, Miami, Florida.

For information on fee, program site, and registration, contact the Division of Continuing Medical Education, University of Miami School of Medicine, Post Office Box 520875, Biscayne Annex, Miami, Florida 33152, phone AC 305 547-6716.

1975 Annual Session

The Arkansas Medical Society will celebrate its 100th anniversary at the 1975 Annual Session. The Annual Session will be held at the Arlington Hotel in Hot Springs, April 20-23, 1975.

1975 Tri-State Scientific Session

On May 14-16, 1975, the Arkansas, Louisiana, and Mississippi Heart Associations and the American Heart Association Council on Clinical Cardiology, will sponsor the 1975 Tri-State Scientific Session.

The sessions will be from 8:00 A.M. until 4:00 P.M. at the Worthen Auditorium, Worthen Bank Building, Little Rock, Arkansas. The subject will be "Current Topics in Cardiology". The session is approved for 12 prescribed hours by the Academy of Family Physicians.

For further information contact Malcolm Pearce, M.D., Arkansas Heart Association, Post Office Box 1610, Little Rock, Arkansas 72203.

Southeastern Surgical Congress

The 43rd Annual Assembly of the Southeastern Surgical Congress Doctors and Nurses Meeting will be held February 17-20, 1975, at the Hyatt Regency Atlanta Hotel, Atlanta, Georgia. One day prior to the meeting, on February 16th, the Congress will sponsor a postgraduate course on "Cancer of the Breast", at the Hyatt Regency Hotel. For information on the meetings, write

A. Hamblin Letton, M.D., Director, Southeastern Surgical Congress, 340 Boulevard N.E., Atlanta, Georgia 30312.



NEW MEMBERS

Dr. Albert Samuel Koenig, III

The Sebastian County Medical Society has accepted for membership Dr. Albert Samuel Koenig, III. Although Dr. Koenig was born in Hattiesburg, Mississippi, he grew-up in Fort Smith, Arkansas.

Dr. Koenig attended Washington University, St. Louis, Missouri, and the University of Arkansas, where he received his B.A. degree in 1965. He was graduated from the University of Arkansas School of Medicine in 1969. His internship was completed at Presbyterian Medical Center, Denver, Colorado. He completed residencies in Pathology at the Presbyterian Medical Center in Denver and the University of Missouri School of Medicine, Columbia. He is a member of the American Society of Clinical Pathologists and International Academy of Pathologists.

Dr. Koenig is now practicing Pathology at 922 Lexington Avenue in Fort Smith, associated with Pathology Laboratory and Drs. A. S. Koenig, R. G. Girkin, O. L. Davenport, and Kent Smith.

Dr. Gary Phillip Wood

Dr. Gary P. Wood, a native of Morrilton, has been accepted for membership in the Pulaski County Medical Society.

Dr. Wood received his B.S. degree from the University of Arkansas in 1960. He also attended Little Rock University from 1960 until 1961. He was graduated from the University of Arkansas

School of Medicine in 1965. Dr. Wood interned at Menorah Medical Center, Kansas City, Missouri. He completed his residency work in Obstetrics and Gynecology at Jewish Hospital, St. Louis, Missouri, and University Hospital, Jackson, Mississippi. He is certified by the American Board of Obstetrics and Gynecology, and he is a Fellow in the American College of Obstetricians and Gynecologists.

Dr. Wood is Assistant Professor of Obstetrics and Gynecology at the University of Arkansas School of Medicine in Little Rock.

Dr. Robert C. Patton

The Lafayette County Medical Society has accepted Dr. Robert C. Patton for membership. He is a native of Magnolia, Arkansas.

Dr. Patton received his B.A. degree from the University of Arkansas in 1969. He was graduated from the University of Arkansas School of Medicine in 1973 and completed his internship at the University of Arkansas Medical Center.

Dr. Patton is practicing family medicine, associated with Dr. Willie J. Lee, at the Lee Clinic, 214 Main, in Stamps.

Dr. William Francis Payne

Dr. William F. Payne has been accepted for membership in the Pulaski County Medical Society. He is a native of Tyler, Texas.

Dr. Payne graduated from State College of Arkansas in Conway with a B.S. degree in 1965. He was graduated from the University of Arkansas School of Medicine in 1969. His internship and residency in Pediatrics were completed at the University of Arkansas Medical Center.

Dr. Payne is practicing Pediatrics at 1210 Look Street in Little Rock, associated with Drs. Dale D. Briggs and Jerry G. Jones.

Dr. Wilbur Mack Giles

The Pulaski County Medical Society has added the name of Dr. Wilbur M. Giles to its membership roll. He is a native of Texarkana, Arkansas.

Dr. Giles graduated from the University of Arkansas in 1962. He received his M.D. degree from the University of Arkansas School of Medicine in 1966 and completed his internship at the University of Arkansas Medical Center. Dr. Giles completed residency programs at the Medical Center, one in General Surgery in 1968, and

another in Neurosurgery in 1974. He is a member of the Southern Medical Association.

Dr. Giles is practicing Neurosurgery at 750 Medical Towers Building in Little Rock. He is associated with Drs. Robert Watson, John Adametz, Ray Jouett, and Robert Dickins, Jr.

Dr. Marolyn N. Speer

The Clark County Medical Society has accepted Dr. Marolyn Speer for membership. She is a native of Harrisburg, Arkansas.

Dr. Speer received her B.A. degree from Phillips University, Enid, Oklahoma, in 1966. She was graduated from the University of Arkansas School of Medicine in 1970. She completed her internship and residency in Radiology at the University of Arkansas Medical Center.

Dr. Speer is practicing Radiology at the Arkadelphia Medical Clinic on West Pine Road in Arkadelphia.

Dr. William A. Holman

The Sebastian County Medical Society has added the name of Dr. William A. Holman to its membership roll. He is a native of Pryor, Oklahoma.

Dr. Holman received his B.A. degree in 1963 from Murray State College, Murray, Kentucky. He was graduated from the University of Louisville School of Medicine in 1967. He completed both his internship and residency work at the City of Memphis Hospitals, Memphis, Tennessee.

Dr. Holman is practicing Internal Medicine and Cardiology at the Cooper Clinic in Fort Smith.

Pulaski County

The following interns and residents are new members of the Pulaski County Medical Society:

Baptist Medical Center

James H. Arkins, Acting Intern

St. Vincent Infirmary

Michael C. Young, Resident—Family Practice

University of Arkansas Medical Center

Ranulfo Atienza, Resident—Radiology

Alan Aycock, Resident—Ear, Nose and Throat

James S. Beckman, Jr., Resident—General Surgery

W. R. Collie, Intern—Pediatrics

Steven A. Davie, Resident—Ear, Nose and Throat

Patrick A. Dolan, Intern—Surgery

R. Jeffrey Eisenach, Resident—Family Practice
 Jorge M. Figueroa, Intern—Pediatrics
 James A. S. Haisten, Intern—Internal Medicine
 Ruben M. Harris, Resident—Neurology
 C. William Hof, Resident—Ophthalmology
 Edwin C. Jones, Resident—Psychiatry
 F. Richard Jordan, Resident—Neurosurgery
 Sam A. McGuire, III, Resident—Family Practice

Jerry D. Malott, Resident—Internal Medicine
 Jeffrey M. Niemann, Resident—Dermatology
 Charles B. Pollock, Resident—Family Practice
 Robert L. Reese, Resident—Radiology
 William J. Smead, Resident—Ophthalmology
 Ricardo F. Sotomora, Resident—Pediatrics
 William Hugh Stephens, Jr., Intern—Medicine
 Ron Williams, Resident—Neurosurgery
 Harold F. Wilson, Resident—Family Practice



PROCEEDINGS OF SOCIETIES

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 12:00 noon on Sunday, September 15, 1974, in the Sam Peck Hotel, Little Rock. Members of the Council present were Long, Saltzman, Shuffield, Jansen, Duzan, Kirkley, Gray, J. Bell, P. Bell, Iuman, Burge, Jameson, Moore, Harris, Kemp, McCrary, Clark, Orr, Kolb, Kirby, Henry, Koenig, Chudy, Wilkins, Hyatt, Verser, Fowler and Watson. Guests present were Thomas Bruce, Stevenson Flanigan, Harry Hayes, Ken Lilly, Kemal Kutait, Purcell Smith, George Mitchell, J. A. Harrel, Mr. Fred Heinemann, Nelson Voldeng, Ph.D., Allen Bradley, Ph.D., and Mr. Carroll Polk. Also present were Mr. Warren, Mr. Schaefer, Miss Richmond, Mr. McIntosh, and Mr. Harris.

Chairman Long introduced Dr. Bruce as the new Dean of the University of Arkansas School of Medicine.

Business was transacted as follows:

1. Upon the motion of Orr, the Council approved the following actions of the Executive Committee:
 - A. Appointed Robert Watson as chairman of the Physician-Nurse Joint Practice Committee;
 - B. Advised the Neurosurgery Department at the Medical Center that the Society

would not oppose that department's offering training to an osteopathic physician since the current Medical Practices Act makes such training a requirement for licensure in the State;

- C. Deferred action on a proposal that the Society co-host a reception at the AMA meeting on a regular basis. A recommendation from the Budget Committee was requested for consideration of the Council.
 - D. Approved travel expenses for a member of the Emergency Health Services Committee to attend a workshop in Atlanta in August.
 - E. Approved Society endorsement of the Arkansas Heart Association's High Blood Pressure Screening and Follow-up Project.
 - F. Requested that the Society's legal counsel file a protest with the State Insurance Commissioner on the malpractice insurance rate increase proposed by St. Paul.
 - G. Set November 24, 1974, as the date for the Winter Meeting. The Holiday Inn Downtown, Little Rock, has been selected as the site.
 - H. Approved Society sponsorship of an INTRAV South America air/sea cruise departing Little Rock January 2, 1975.
2. Chairman Long reported for H. W. Thomas, Chairman of the Budget Committee, that the recommendation from the Budget Committee was to approve Society sponsorship of a hospitality suite at AMA meetings on an individual-meeting basis rather than approving sponsorship on an on-going basis. Upon motion of Orr, the Council approved the recommendation of the Budget Committee.

3. Upon motion of Koenig, the Council voted to co-sponsor with Oklahoma and Kansas a hospitality suite at the AMA meeting in Portland in December 1974.
4. By motion of Henry, the Council voted to approve actions taken July 21st by members of the Council as a "committee of the whole".
5. The Council heard Charles Wilkins discuss problems encountered in getting a school of nursing established at Arkansas Tech. He requested that the Council reaffirm the Society's stand in support of ADN nursing programs in every state-supported college and university and he suggested that the Council inform the members of the State Board of Higher Education of that position. He also suggested that the State Board of Nursing be informed of the Society's support of its program to bring about a much better oriented and much better organized training programs in the State of Arkansas. Upon the motion of Saltzman, the Council so voted.
6. The Council heard a request by George Mitchell of Arkansas Blue Cross-Blue Shield for Society endorsement of their proposal to contract as claims processor for the State Medicaid and Medically-Needy Programs. Upon motion of Koenig, the Council voted to endorse Blue Cross-Blue Shield's proposal.
7. The Council received for information reports from Harry Hayes, Chairman of the Insurance Committee, and Mr. Eugene Warren, legal counsel, on the malpractice insurance situation.
8. Dr. Voldeng discussed Poison Control, Drug Information Center and Toxicology Laboratory services which have been sponsored by the Emergency Medical Services System of Arkansas. The State Health Department has contracted with the Emergency Medical Services Systems—Health Systems Foundation to provide a statewide drug information center, poison control and toxicology laboratory, with subcontracts for part of the work to the School of Pharmacy and the University Medical Center Library. Upon the motion of Saltzman, the Council voted to endorse the program as presented.
9. The Council considered the request for approval of the "Tel-Med" program which was proposed by the Director of the Office of Continuing Education for Physicians at the University Medical Center. Members of the Council requested a sampling of tape transcripts for review before considering approval of the program.
10. Chairman Long advised the Council of the premium increase on the Blue Cross-Blue Shield group plan and the availability of additional major medical coverage. Upon the motion of McCrary, the Council voted to accept the revised premium and to request that the major medical coverage be increased to \$250,000.
11. Chairman Ken Lilly reported for the special ad hoc committee to consider opposition to PSRO. He presented two specific requests to the Council:
 - A. A copy of the law be sent to each member with an attachment prepared by the committee outlining the deleterious effects of the law;
 - B. A speaker be obtained for the winter meeting program to explain the deleterious effects of the law.Upon the motion of Shuffield, the Council voted to implement recommendation "A" as soon as feasible.
12. Upon motion of Koenig, the Council voted to appoint Ralph Ingram of Fort Smith to replace Kemal Kutait as the alternate representative for the Medicaid Pharmacy Peer Review Committee.
13. Chairman of the Annual Session Committee, Robert McCrary, outlined some of the plans for the 1975 annual meeting and requested Council approval of several specific proposals:
 - A. A Monday afternoon parade starting off with a big sign "100th Year of Serving Arkansas People" with officers of the Society and/or Fifty Year Club members in antique cars.
 - B. Setting up tent on green opposite the Arlington for displaying historical exhibits to the public and having printed historical brochures for distribution to the public.
 - C. Having politically-oriented speaker at dinner for Monday night.The Council approved these general ideas, by motion of P. Bell.

14. The Council voted, by motion of Orr, to approve a proposed study on spinal cord injuries by the Arkansas League for Nursing.
 15. The Medical School Dean presented a proposal for a Physician Recruitment Fair at the Medical Center in October to be co-sponsored by the School and the Medical Society. Representatives of chambers of commerce, local newspapers, etc., from communities needing physicians will be invited to set up displays and visit with medical students and house staff. Upon motion of Orr, the Council voted to approve Society co-sponsorship.
 16. The Council voted to approve the drafting of a new abortion law for the State in line with the Supreme Court decision, with such proposed legislation prohibiting advertising of any type of abortion-related services.
 17. The Council considered the matter of continuing medical education and heard numerous ideas presented. It was suggested that the Society get its annual scientific program approved for certification for the AMA Recognition Award. Dean Bruce advised that the Medical School was in the process of getting such certification for its courses. Dr. Jansen mentioned the recertification requirements facing most of the specialists and the work being done by the specialty groups as well as the Southern Medical Association in continuing education. The Council voted to pass ideas presented on to the Committee on Medical Education for their consideration and action.
 18. Upon the motion of Henry, the Council voted to present a plaque of appreciation to Georgia Lee Tucker, who retired recently after more than twenty years as Executive Director of the Arkansas State Licensed Practical Nurses Association. President Saltzman will present the plaque at the annual meeting of the LPN group in October 1974.
 19. Upon the motion of Orr, the Council voted to approve donation of \$500 to the Arkansas Political Education Committee contingent upon legal counsel's opinion that it is permissible.
 20. Upon the motion of Kolb, the Council voted to approve the general outline for the winter meeting as presented and to authorize the Executive Committee to select a speaker for the luncheon.
 21. The Council heard a request from Congressman Mills that the Society participate in a reception at the Pleasant Valley Country Club October 5th honoring the new president of the U. S. Jaycees. By motion of Orr, the Council voted to receive the invitation for information only, with participation in the event left to individual members of the Society.
- The Council adjourned at 3:00 P.M.
APPROVED: C. C. Long, M.D.
Chairman



WOMAN'S AUXILIARY

THIRD ANNUAL

AMA-ERF Sharing Card

1974

WHO?.....Sponsored by the Woman's Auxiliary to the Arkansas Medical Society, statewide.

WHAT?.....A non-sectarian greeting card, designed by Mrs. William S. Orr, with your name printed under your county, addressed and mailed for you about December 17th, to *each* member of the Arkansas Medical Society and the faculty physicians at the University of Arkansas Medical School. This card will reach approximately 1800 physicians statewide.

WHY?.....To benefit the American Medical Association Education and Research Fund (AMA-ERF) in Arkansas, and to take the place of cards to physicians from physicians and businesses.

WHERE?.....Contact your Auxiliary AMA-ERF County Chairman, or fill in the form below and mail with your check to the address shown.

WHEN?.....Deadline for receiving names is December 1, 1974.

HOW MUCH?.....Individuals or families, \$20.00, minimum.
Businesses, corporations, or groups, \$40.00, minimum.

DEDUCTIBLE?.....Contributions to AMA-ERF are income tax deductible.

Name: _____
(exactly as you wish it to appear on the card)

Address: _____
(City) (State) (Zip)

County Auxiliary to receive credit: _____

_____ I enclose \$20.00 for individual or family.

_____ I enclose \$40.00 for a business, corporation or group.

_____ I do not want my name included on the card, but would like to help medical education in Arkansas and am enclosing a check for \$_____.

MAKE CHECKS PAYABLE TO: AMA-ERF AUXILIARY FUND.

MAIL BEFORE DECEMBER 1, 1974 to: Mrs. David Barclay,
State Chairman, AMA-ERF Auxiliary Fund
#14 Arrow Ridge Court
Little Rock, Arkansas 72205

OPPORTUNITIES IN ARKANSAS FOR SPECIALTY PRACTICE

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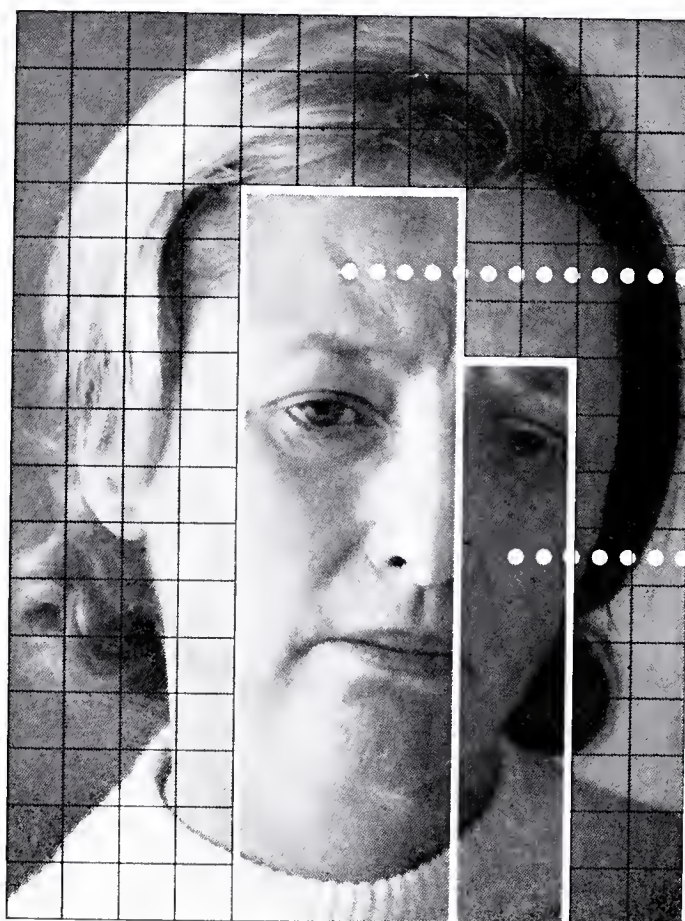
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For further information on this subject, the following references are provided:

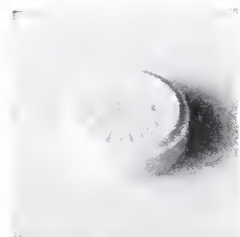
1. Henry BW, *et al*: *Dis Nerv Syst* 30:675-679, Oct 1969.
2. Hollister LE, *et al*: *Arch Gen Psychiatry* 24:273-278, Mar 1971.
3. Claghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970.

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

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MR. PAUL C. SCHAEFER, Business Manager
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The Rural Health Program in Arkansas*

Ben N. Saltzman, M.D.**

In 1946 the president of the Arkansas Medical Society recommended in an address to the delegates that a committee be appointed from the society to work with the State Board of Health for the betterment of rural health. That was the year I joined the Society. He stated, "This is a phase of our work that has been too-long neglected. This is not essentially the physicians' whole responsibility, but with cooperation with women's organizations, civic clubs, etc., it can bring about better service." In 1947 after attending the National Conference on Rural Health held in Chicago, the chairman of the Committee on Rural Health recommended that we in Arkansas should: 1. Improve the small-town hospital, 2. Advocate and support in every way possible the building of better rural roads, 3. Develop a voluntary prepayment medical plan, 4. Expand public health services and public health education, 5. Improve rural nursing care, 6. Provide positive action in improving the medical care of the Negro, 7. Expand medical education and training and, 8. Promote more active participation by our society in the annual National Conference on Rural Health. The next year, the chairman planned a health conference in cooperation with the Extension Service and various farm groups. In 1949 the Committee on Rural Health sponsored exhibits at county fairs over the entire state, helped organize an Arkansas Health Council, attended the National Conference in Kansas City, launched a physicians' placement bureau, urged society participation in organizing county health councils, recognized the work on the extension service, crediting Aubrey Gates and Helen Robinson and urged increased attendance at annual state Rural Health Conferences.

1950 saw the committee supporting drives in eight counties for voluntary prepaid hospital and medical insurance plans, organizing several health councils, supplying display booths in

county fairs and recommending establishment of medical school lectures concerning the advantages of small town practice.

In 1951, following attendance at the 6th National Rural Health Conference in Memphis, Tennessee, Society President, Dr. Charles Henry, enlarged the activities of the Rural Health Committee, helped establish an advisory committee which included the Agricultural Extension Service, the Arkansas Farm Bureau Federation, the Woman's Auxiliary of the Arkansas Medical Society and the Arkansas Dental Society. A state Rural Health Conference was developed and more than 600 people attended. It was adjudged by the Chairman of the Council on Rural Health, Dr. F. S. Crockett, to be one of the best ever put on by a state. The chairman of the Arkansas Committee noted that the conference stimulated interest in the rural health problems in the state, stimulated interest in establishing more county health councils, stimulated interest on the part of the Arkansas Medical Society's membership, established good relations with the advisory organizations, and reflected well on the State Medical Society, statewide.

1952 saw the development of the second Rural Health Conference in Arkansas with over 600 in attendance. Your speaker, as a member of the Rural Health Committee, made his first speech on the "Practice of Medicine and its Problems in a Small Community." The topics discussed ranged from dental problems, through nursing services, small hospital problems, health personnel problems to success stories in rural communities. Once again cooperation on the part of the advisory committee was superb. The Committee on Rural Health once again established the interest of the physicians of the state in the health problems of the people of the state.

1953 saw the creation of the third State Rural Health Conference. The chairman of the committee that year and every year since, was your speaker. I'll admit, I was hooked. I felt that the activities of the committee best reflected the

*Presented to the Chairmen of State Rural Health Committees—at the National Rural Health Conference, April 24, 1974, Detroit, Michigan.

**4301 West Markham, Little Rock, Arkansas 72205.

interest of the physicians of the state. We wanted the people to know that we cared. That year Dr. Charles Henry served on the Council on Rural Health of the AMA and provided invaluable assistance. The conference had over 500 in attendance with greater representation of medical society members than ever before. There were 78 in attendance.

1954 saw the creation of a Public Health Committee with the Committee on Rural Health as a subcommittee. Actually, the chairman of the Rural Health Committee served as Public Health chairman. It was a method of bringing several public health subcommittees under one roof. Arkansas is a rural state, and public health is rural health there. Another rural health conference was held and much of the national program was incorporated into the plenary sessions. The years that followed brought forth other state conferences with diminishing attendance. After eight conferences, it was felt that the committee could be more productive by promoting some of the recommendations of the Council on Rural Health in the state. The committee continued its cooperation with its advisory committee, particularly with the Cooperative Extension Service.

In 1961, I was honored by being appointed a member of the Council on Rural Health of the American Medical Association. Membership on the Council helped bring into focus problems applicable to our state. The committee received Medical Society approval to enter into the Rural Community Improvement Program of the Agricultural Extension Service and the Arkansas Power and Light Company. The Arkansas Medical Society awarded plaques to Rural Communities each year for various health and safety programs in which they excelled.

In 1963 the Committee hosted the National Rural Health Conference in Hot Springs, Arkansas, one of the most successful in many years from the standpoint of attendance and program.

I was elected vice-chairman of the Council on Rural Health in 1965 and chairman in 1966. The RCI program has continued in Arkansas with the complete cooperation of the committee.

The ninth Arkansas Rural Health Conference was held in Little Rock in 1968 and was jointly sponsored by the Arkansas Academy of General Practice. The conference concerned itself with rural emergency medical services and was highly successful in that all members of the advisory

committee had input into program content and participation. A resolution on emergency medical services was adopted by the Council of the Arkansas Medical Society that year.

The committee was active in 1968 in sponsoring resolutions and having them passed and implemented by the actions of the Council and House of Delegates of the Arkansas Medical Society. These included the upgrading of Rural Emergency Medical Services, the use of Home Health Care Services, the extension of Health Manpower to rural communities and the use of the Slow Moving Vehicle Emblem in the state. The Committee was now named the Public Health Committee with Rural Health in parentheses. It was felt that public health in Arkansas is rural health.

In 1969, the committee helped formulate and implement a statewide Emergency Health Services Conference in Little Rock. The committee served as a resource for both the Comprehensive Health Planning and Regional Medical Programs in the state. It began a system of awards to winners of 4-H health projects in the state both on the district and state levels which continues to the present time. Members of the Council of the Arkansas Medical Society present the awards annually.

The Public Health Committee had input in the development of a diet manual for the Arkansas Health Department.

In 1973, the committee endorsed the State Health Department's Venereal Disease Control activity and obtained approval and support from the House of Delegates of the State Medical Society. It also renewed emphasis on the support of the Health Department's Home Health Services Program.

Over the years, this committee continues to serve the Arkansas Medical Society to the fullest extent in promoting the programs of the American Medical Association and its Council on Rural Health. It has continued to serve the people of our state. In cooperation with the many official and voluntary agencies of the state, it has helped Arkansas maintain leadership in the promotion of health activities recommended by the government. It is a good feeling to see many of the health programs now being carried on which originated with the activities of our Committee on Rural Health. I even feel good when I get behind a slow moving vehicle with that colorful emblem sitting on its tail.

The Diagnosis of Penile Pathology

John F. Redman, M.D. and Nabil K. Bissada, M.D.*

The patient with complaints referable to the penis is often an anxious patient who is appreciative of a ready diagnosis. Our purpose is to review the more common abnormalities and disease states of the penis seen by the practicing physician.

Most of the diagnoses of penile pathology can be made by inspection. The examination of the penis should always include an examination of the urethral meatus and retraction of the prepuce for inspection if the patient is uncircumcised.

Hypospadias

Hypospadias by definition refers to the location of the urethral meatus anywhere proximal and ventral to its normal position. (Fig. 1) Hypospadias is usually diagnosed at birth and,

if severe, can raise questions regarding the gender of the patient. Hypospadias may be classified according to the position of the meatus on the penile shaft, i.e., glandular, coronal, penile, penoscrotal, and perineal. (Fig. 2) In addition to the malposition of the meatus, two other physical findings are striking. One is the curious hooded prepuce that exists; and the other is the ventral curvature, or chordee, that is most pronounced with the penis in the turgid state. (Fig. 3) It is important that children with hypospadias of any degree not be circumcised at birth as the supple hairless skin of the prepuce is frequently employed in subsequent repair. Repair may be accomplished by plastic surgical techniques in one to three stages. The first stage or excision of the fibrous tissue causing the



Figure 1

Hypospadias—note urethral meatus at penoscrotal junction.

*Division of Urology, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

Address correspondence to: John F. Redman, M.D., Associate Professor and Chairman, Division of Urology, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

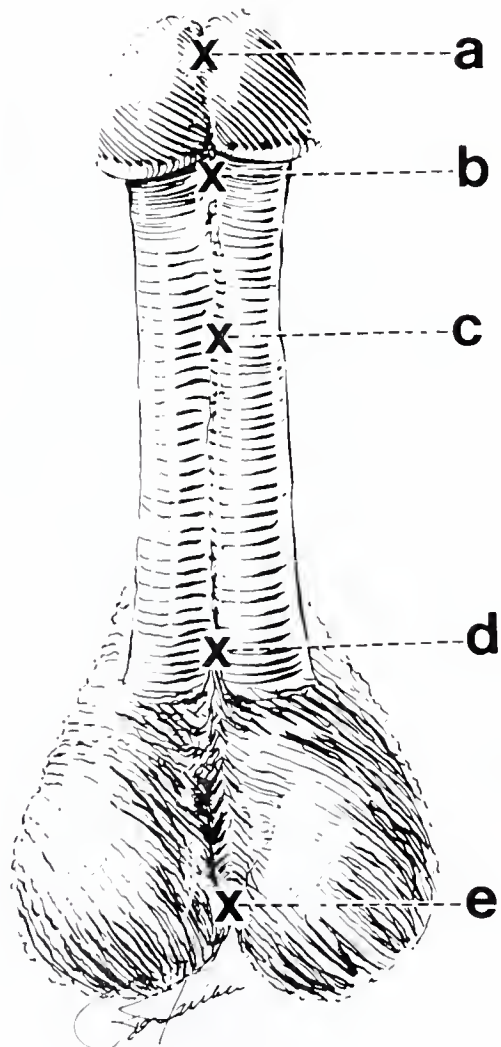


Figure 2

Classification of hypospadias by position of the urethral meatus: (a) glandular, (b) coronal, (c) penile, (d) penoscrotal, (e) perineal.



Figure 3
Penile hypospadias with hood prepuce and ventral curvature (chordee).

ventral curvature may be undertaken at about age 18 months. Final repair is hopefully accomplished prior to the child's starting school. The child with hypospadias may have an incidence of other urinary anomalies that approach 25%; and, therefore, excretory urography should be obtained.

Meatal Stenosis

Examination of every male patient should include inspection of the urethral meatus. Approximately 10% of newborn males have a bona fide meatal stenosis. The caliber may be quickly ascertained by grasping the glandular tissue on either side of the meatus and drawing outward. If the meatus is stenotic, a meatotomy may be done as an office procedure by injecting the meatus ventrally with 1% xylocaine without epinephrine, applying a crushing clamp, and then incising in the crushed area. (Fig. 4)

Phimosis

Phimosis refers to inability to retract the prepuce, though in common usage it may also

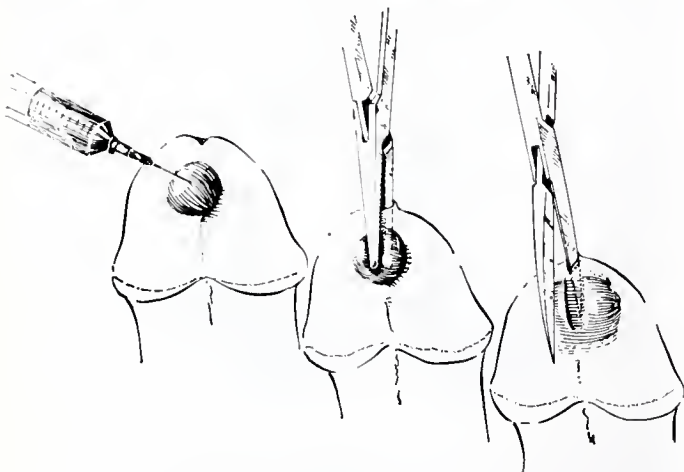


Figure 4
Technique of meatotomy.

refer to the redundant prepuce. In the young the prepuce may appear to be phimotic when it actually is not, being held by easily lysed adhesions. Not infrequently we are asked to see children with penile masses which proved to be large accumulations of smegma, particularly around the corona. The phimotic prepuce should be retracted for examination of the urethral meatus and entire glans if possible. If circumcision is not done at birth, the surgical procedure should be delayed because of the inherent risk of anesthesia in the very young.

Paraphimosis

When the prepuce is retracted to expose the glans penis and cannot be returned to its normal position, the term paraphimosis is applied. The prepuce then becomes edematous quite rapidly with increased discomfort to the patient. We have been surprised to see the number of patients with paraphimosis who have been followed by a physician for some time prior to diagnosis and treatment. Immediate treatment requires the slipping of the ring-like prepuce over the glans. This is facilitated by compressing the glans with the thumbs and drawing the prepuce forward with the index fingers of each hand. (Fig. 5)

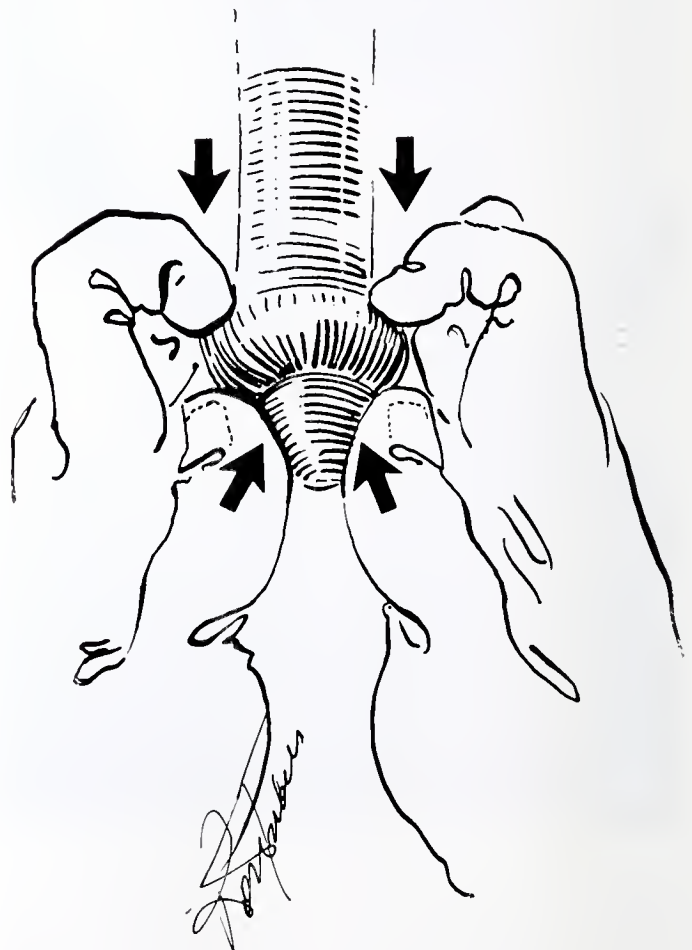


Figure 5
Technique of manually reducing a paraphimosis.

Gauze sponges thinned out to one layer thickness aid in this maneuver. Another technique is to grasp the edges of the prepuce four-square with Babcock or Allis clamps and then draw the prepuce forward over the glans. The occurrence of paraphimosis is an indication for subsequent circumcision. A surprising number of instances of paraphimosis are iatrogenic because the physician fails to reduce the prepuce following retraction of the prepuce for examination of instrumentation.

Balanitis and Balanoposthitis

Balanitis refers to inflammation of the glans penis while balanoposthitis refers to inflammation of the prepuce in addition to the glans. Infecting organisms vary. The problem is usually found only in the uncircumcised and is primarily due to poor hygiene, either the patient's or his sexual partner's. Diabetes is always a consideration particularly if the balanitis is difficult to clear. Circumcision is usually curative but is radical treatment. Conservative means include attention to cleanliness and dryness, antibiotic ointments, topical steroids, and mycostatin. It should be remembered that an inflamed prepuce or glans may herald other disease processes. If the involvement does not clear easily or the area of inflammation appears to be discrete, the expert eye of a dermatologist should be enlisted.

Condyloma Acuminatum

Penile condylomata acuminata or venereal warts are usually noted in the uncircumcised. Commonly, they are located near the corona and most frequently are confined to the prepuce, although they may involve the glans and the urethra. 10-25% Podophyllum in Benzoin applied carefully with a cotton-tipped applicator causes resolution in a few days. Recurrence is common if circumcision is not done in the interim before recurrence. Urethral meatal caruncles should be differentiated from condylomata.

Urethral Meatal Caruncle

Urethral meatal caruncles may present as red warty excrescences that protrude from just within the confines of the meatus. They are usually pink or red in color. The patient's primary complaint is either diminution of urinary stream size or spraying of the stream. Treatment is best accomplished by excision with light fulguration of the base of the lesion. The lesions are benign.

Carcinoma of the Penis and Other Discrete Lesions of the Penis

Carcinoma of the penis usually presents as a slightly-raised, rough lesion either on the glans or the prepuce. (Fig. 6) There may be ulceration also. Since most carcinoma of the penis occurs in the uncircumcised, it is imperative that the prepuce be retracted for complete examination of the glans including the corona. Any suspicious lesion, i.e., any infected, ulcerated, or raised lesion, should be biopsied. One-third of patients with penile carcinoma will have metastasis at the time of diagnosis which indicates the delay which often occurs. Treatment may be only a conservative excision, but generally lesions when diagnosed are large enough that actual penile amputation with at least a 2 cm. margin is necessary. The differential diagnosis of discrete penile lesions and ulcerations parallels that of balanitis. In addition to carcinoma, the differential diagnosis includes chancroid, syphilis, lymphogranuloma venereum, and granuloma inguinalae. Appropriate tests to rule out these lesions should be considered.

Pyronie's Disease

This is a perplexing condition which has been likened to Dupuytren's contracture. Patients



Figure 6
Squamous cell carcinoma of the ventral aspect of the glans penis and prepuce. The prepuce is retracted.

complain primarily of painful curvature of the penis with erection. Examination discloses penile curvature sometimes in the flaccid state; but usually there will be found by palpation a hard, fibrous plaque not uncommonly in the midline dorsally. The disease is usually self-limiting and may lessen or even resolve in four to six years spontaneously. Numerous treatments have been used with varying reports of success. They include excision, radiotherapy, vitamin E, Potaba (potassium P-aminobenzoate), and steroid injection. Reassurance may be the best treatment.

Priapism

Priapism refers to pathological erections not related to sexual stimulus. Generally, an etiology cannot be found; but some known causations are leukemia and sickle cell disease. Conservative management, such as cold compresses and seda-

tion, may be all that is necessary. Corporal aspiration constitutes a more aggressive management. At times it is necessary to resort to surgical vascular diversion, such as corpora cavernosal-corpora spongiosal shunt. Any delays in initiation of treatment should be avoided because of the risk of subsequent impotence.

Summary

Some of the more common abnormalities of the penis have been reviewed. The diagnostic yield will be increased if practicing physicians will include a careful examination of the penis in their physical examination. The diagnosis of discrete lesions of the penis is not easy even for those who see them frequently. For this reason consultation should be considered if there is doubt as to a correct diagnosis or if the lesion does not heal quickly.



Mallet Finger

Kenneth G. Jones, M.D.*

I know of no other abnormality, so common and so small, which can produce so much botheration for the patient and his physician as the entity known as "mallet finger". Fortunately, the ultimate functional disability associated with an uncorrected dropped fingertip is, in most instances, not extensive since the patient is able to adapt to the deformity.

This sometimes difficult-to-manage injury consists of a disruption of the functional integrity of the extensor mechanism of the digit at or near insertion of the tendon into the base of the dorsal aspect of the distal phalanx (Fig. 1). As a

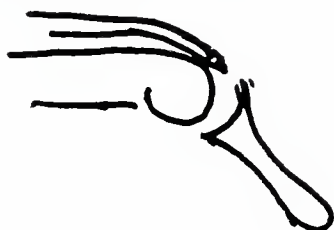


Fig. 1

consequence of a relative lengthening of the common extensor tendon distal to the PIP joint, the efficiency of this segment of the tendon is diminished while the efficiency of the central slip of the tendon which inserts into the dorsal aspect of the base of the middle phalanx is increased (Fig. 2). As a consequence, upon exten-

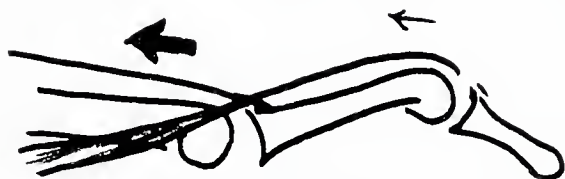


Fig. 2

sion of the finger the central slip will then exert a greater than normal pull on the middle

phalanx, often producing a secondary hyperextension deformity of the PIP joint. The extent of this secondary deformity at the PIP joint level is a product of the abnormal pull exerted and the resistance of the volar structures, principally the volar capsule. As a rule, any deformity of the PIP joint develops slowly. When it is fully developed the mallet finger deformity consists of: the initial-primary flexion deformity of the DIP joint and a delayed-secondary hyperextension deformity of the PIP joint. As a rule the two deformities are of essentially equal degree. At this stage the finger may resemble a "swan's neck", (Fig. 3) more than a "mallet." When

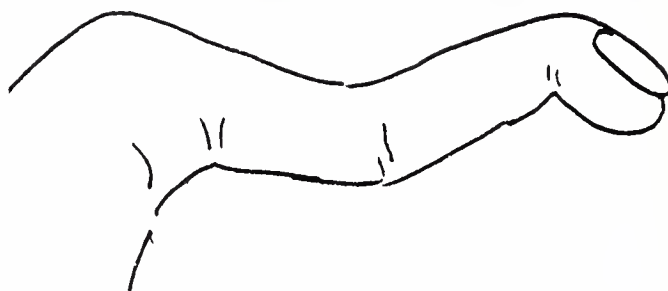


Fig. 3

the patient has congenitally relaxed PIP joints, the swan's neck is more likely to be marked.

Trauma is the usual causative agent. However, in some patients with degenerative arthritis, the loss of space in the DIP joints secondary to cartilage and subchondral bone absorption produces a similar abnormality. Once again, the mechanics of the deformity is lengthening of the extensor tendon mechanism distal to the PIP relative to the central portion of the tendon proximal to the joint. In this instance, however, the conservative treatment, usually efficacious for the traumatic mallet finger deformity, will

*Post Office Box 5270, Little Rock, Arkansas 72205.

be unproductive. Only surgery, which is seldom indicated, will prove efficacious.

Injury to the extensor mechanism usually results from the application of a strong flexion force to the dorsal surface of the distal phalanx while the extensor mechanism is taut in extension. The disruption of the extensor mechanism which occurs takes place at one of the several possible points.

As a rule this is a closed injury, with rupture of the extensor tendon occurring close to its insertion into the terminal phalanx or with avulsion of the tendon from its insertion into the terminal phalanx. A laceration over the dorsal aspect of the digit just proximal to the DIP joint can, of course, produce a similar though open injury.

Another, not infrequently seen variant, consists of an avulsion fracture of the base of the distal phalanx (Fig. 4). Since this is an oblique

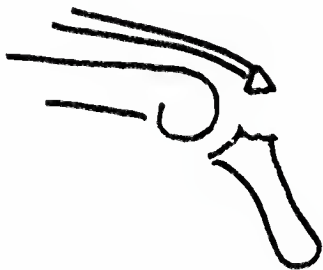


Fig. 4

intra-articular fracture, when the avulsed fragment is large, volar subluxation of the distal phalanx at the DIP joint may occur as an added complication. Still another variation from the usual, seen in physically immature patients, is seen when the overpowering flexion force is expended through the epiphyseal plate of the distal phalanx. In this instance the base of the nail, along with its matrix and the metaphysis of the distal phalanx, is compounded (Fig. 5).

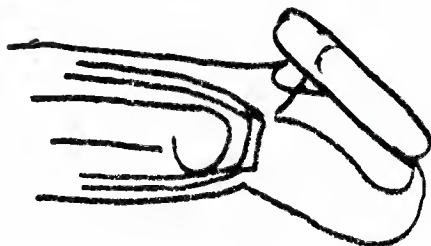


Fig. 5

Though a "mean looking injury" the displacement is easily reduced, after wound toilet, by introducing a small curved clamp, or like instrument, between the exposed lunula of the nail and the proximal portion of the nail fold—the

mantle—to direct these tissues back into an anatomical relationship. Splinting for three weeks should prove to be corrective.

Laceration of the extensor tendon, as a rule, presents a more difficult problem in management. At this level, the tendon is ribbon-like, making effective suture difficult or even impossible. The tendon, following healing, is usually found to be relatively lengthened and is often associated with tendon to bone adhesions so that a residual "mallet finger" deformity from these injuries may be anticipated. Cleansing of the wound, followed by loose closure of the skin only and splinting of the DIP and PIP joints in extension for 4-6 weeks, if the tendon ends can be approximated, is often the best possible management. It is wise to acquaint this patient with the fact that he has sustained more than "a simple cut of the finger", and, as a consequence, may experience some degree of residual deformity and impaired function.

Closed tendon disruptions usually can be managed closed with satisfactory results if splinting is adequate and is continued long enough to permit proper healing. Unfortunately, many patients are not pleased to immobilize the digit sufficiently long to permit healing which is strong enough to reconstitute the functional integrity of the extensor mechanism—since 6-12 weeks is the average time required. Therein lies the problem in patient management.

Although immobilization of the digit in every conceivable position, with all sorts of devices, has been advocated, there is little evidence that esoteric methods produce results superior to simple splinting of the DIP joint in extension, or even in slight hyperextension, for the period stated. The splint, which is held in place by a loop of one-half inch adhesive tape placed around the splint and the finger should be removed daily for skin care, but without permitting even momentary flexion of the distal phalanx. This can be readily accomplished by the patient opposing his thumb to the tip of the injured finger when the splint is removed (Fig. 6). One of the easiest to use and most satisfactory splints for this purpose is a molded polythene splint** made and marketed by the English (Fig. 7). A malleable aluminum splint or even a portion of a tongue blade can prove adequate on occasions.

**Molded Polythene Mallet Finger Splint: Pryor & Howard, Willow Lane, Mitcham, Surrey, CR 4, 4 US, England—Six stock sizes—(\$1.60 each as of 3-8-73).

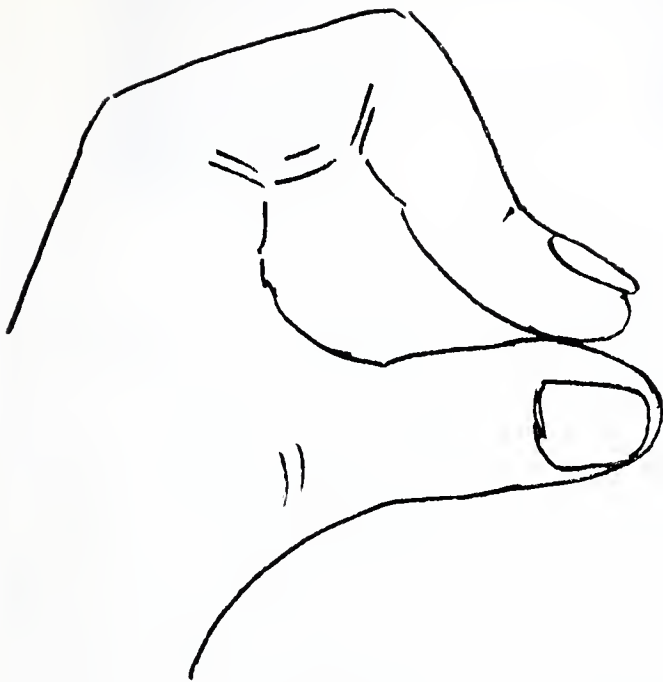


Fig. 6

These types of splints may be used also for those deformities due to an avulsion fracture of the base of the distal phalanx if the bone fragments can be shown by radiogram to be in apposition after application of the device. If an anatomical reduction is not possible by closed means, an open reduction and stabilization by pins or pull-out wire should be considered. This, however, must be done with a great deal of surgical finesse in order to be successful and if

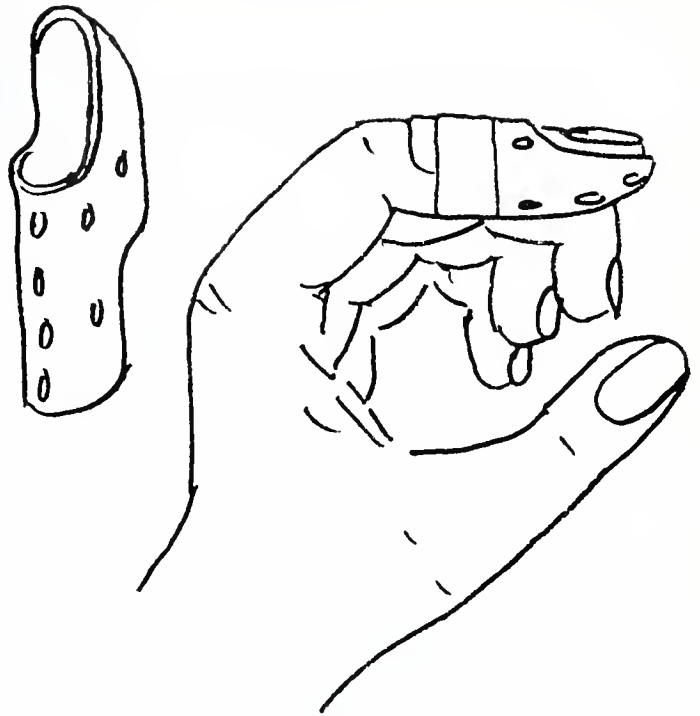


Fig. 7

complications are to be avoided.

Even those patients who fail to present themselves for several weeks after injury may respond to closed splinting for 6-12 weeks.

And, lastly, some patients who do not anticipate being inconvenienced by a "mallet finger" deformity may elect to forego the inconvenience of prolonged immobilization and choose to have no treatment.





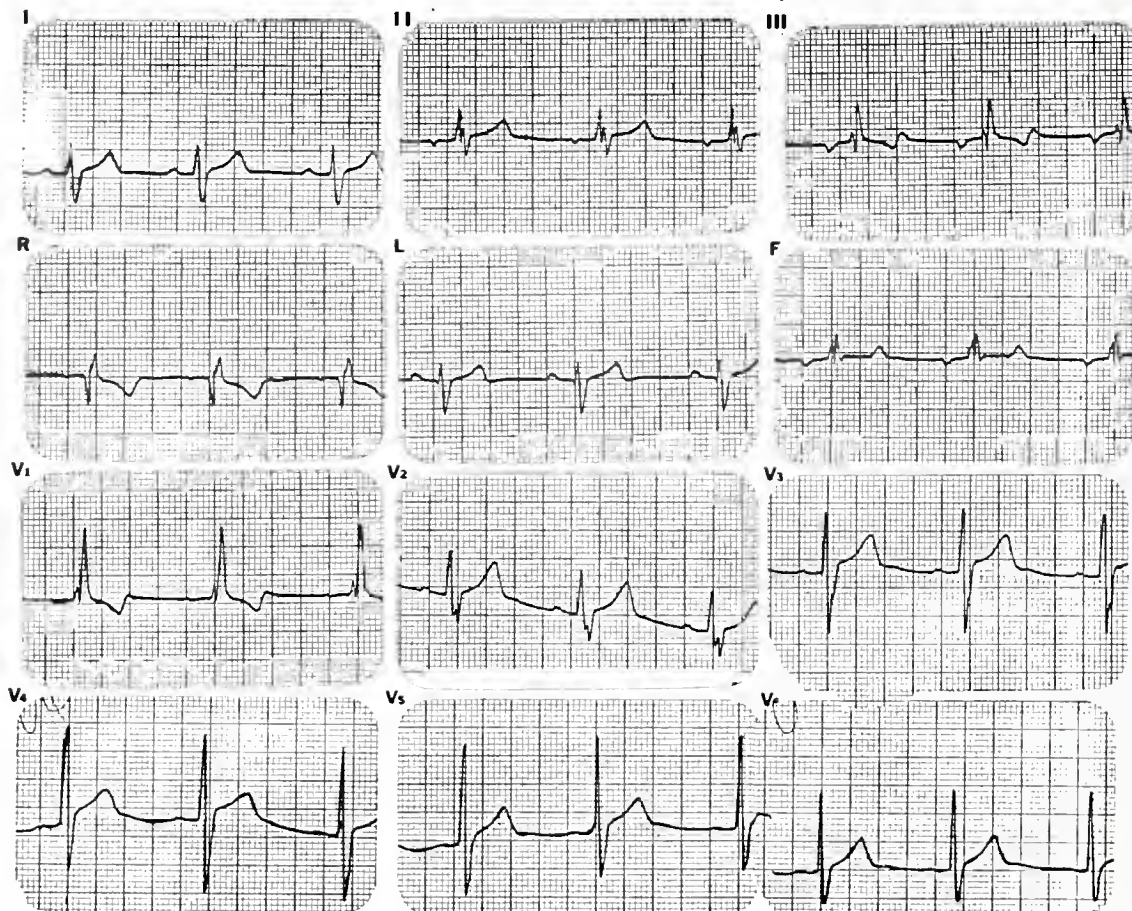
ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See answer on page 246)

Case: 19-year-old male with atrial septal defect.



David E. Smith, M.D., Cardiology Fellow
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Patient Education: A Part of Quality Health Care?

Carol Hopkins, Public Health Educator*

The term "health education" is a broadly used term to refer to a wide variety of activities from information to highly specialized training. A recent definition is: "Health education is a process that bridges the gap between health information and health practices." (Report of the President's Committee on Health Education, New York City, 1973 p. 17.)

Who helps to build this bridge? Those of us in the health field, whether we're with the medical or para-medical profession, health or voluntary agencies or other related fields. We are *all* health educators. We have the knowledge and resources and it's up to us to help people (patients) make responsible decisions concerning their health care. How do we do this? By developing a program of "patient education."

There is a lack of high quality health care if patients do not understand the "whys" and "wherefores" of medication, testing, bed rest, etc.

Patients have a "need" and a "right" to know: why all of the specific prescription must be taken, what to do if . . . , why three sets of X-rays must be made, why if they have been bed-ridden must they resume physical activity slowly, etc. But, when this information is presented it must be done in a manner that is understandable and acceptable by the patient and it must be positively integrated into his attitudes to produce desired behavioral changes. Without behavioral changes, can there be much progress in the patient's health?

Also to be included in "patient education" are key people in the life of the patient—parents, mates, sometimes supervisors. These are the ones who can help the patient adjust quicker to behavioral changes. If a woman finds out her

husband is a diabetic there are many things she has a "right to know", such as, how to prepare food, how to give injections, what having diabetes means in physical activities, what to do for an insulin reaction and much more. Patients need to know what kind of changes in their life style must be made following illness. Long term chronic illness means adjustment for the entire family and we are the ones who must help these people understand.

Much of patient education is geared to three levels of prevention: primary—before the disease is contracted, secondary—early detection and early treatment, and tertiary—requires specialized medical, surgical and/or rehabilitation services with the bulk of education being tertiary. We have always in the past turned to remedies for problems instead of prevention of problems. What exactly would it mean to a family if they could prevent a stroke by controlling hypertension instead of adjusting to and paying for the stroke and its cost? Who is responsible for teaching this family control of hypertension?

Patients and their families are not the only ones who should change prevalent attitudes; another group is the professionals.

For many, many years we have thought of the patient as being passive to the point that he is not capable of participating in his own health care. In the past we have assumed that the patient lacks the knowledge necessary to carry out advice or follow certain procedures. This, in the majority of cases, simply isn't true. Patients have not been given the opportunity to utilize the information that is available—information, instruction and supervision that only we, as professionals, can give them.

Improved health status of the patient is the

*Arkansas Department of Health, Division of Public Health Education, 4815 West Markham, Little Rock, Arkansas 72205.

reason for patient education. With patient education there is a secondary benefit: use of an untapped resource.

We are well aware of the continuously rising cost of health care and the acute shortage of manpower. The health industry employs nearly five million people (professional and supportive) and is the third largest industry, by manpower, in the U.S. Our major problems with employment seem to be deficits and poor distribution of health personnel.

One of the ways to alleviate the health manpower shortage is to use the untapped resource—the citizen himself, the person who may become the patient. "Patient education" can make it possible to effectively utilize this resource of manpower.

Exactly what educational methods can be used to implement a program of patient education? Any that would be used in other educational programs. This educational process can go on in any setting with delivery of health services.

The Arkansas Department of Health is one such place in our State. Through the Health Department there are 82 county units in 75 counties. Clinics offering health services include: tuberculosis chest clinics, family planning and maternity clinics, nutrition counseling, cancer detection and venereal disease detection to mention a few.

In all of the clinics the educational process is organized and coordinated with other processes of patient care. There is a close relationship between doctors, nurses, support personnel and the patient.

In nutrition counseling, for example, it is explained to the parent of a child with phenylketonuria why a special diet must be followed; a person with hyperlipoproteinemia also is given complete counseling as well as those with diabetes, low-sodium, low-cholesterol and many others.

In the Handicapped Children's Center when children are in speech therapy classes, parents are given the opportunity to watch the therapy through special mirrors. Parents can then carry on minimal therapy at home.

Patients in venereal disease clinics are shown films on the disease process, prophylactic methods, reasons for naming contacts, and reason for taking all of the medication prescribed.

Tuberculosis patients are taught about the disease process, differences of treatment—medi-

cation along with hospitalization in a general hospital setting, if necessary, length of treatment, the necessity of having family members checked for the disease and other aspects of the disease.

Through family planning clinics patients are taught the various methods of birth control and given the opportunity to choose which one is best for them, barring contraindications of the doctor, explanations are given on proper use of the one they choose. Patients also are given Pap smears for detection of cervical cancer and it is explained that the reasons for periodic testing is early detection of cancer and what can be done if a problem is found in the early stages. (Breast self-examination).

All of the other clinics use basic methods of the educational processes to assure that people availing themselves of Health Department services receive an optimum level of health care—quality health care.

A greater understanding of patient education and implementation of its principles will enable health personnel to work with and consider each person/patient on an individual basis, as being unique, and as one who has the "right to know"—information concerning his health and guidance in effective utilization of that information.



O B I T U A R Y

Dr. Harry Wilkerson Savery

Dr. Harry W. Savery of Van Buren died October 29, 1974. He was born in Van Buren on March 14, 1895.

Dr. Savery was a 1921 graduate of the University of Tennessee College of Medicine, Memphis, Tennessee. He was a practicing physician in Van Buren for more than fifty years, and received a fifty-year pin from his medical school in 1971.

He was a member of the Crawford County Medical Society, the Arkansas Medical Society, and the American Medical Association.

Dr. Savery is survived by his wife, Betty, one son, and five grandchildren.



EDITORIAL

Relationship of Blood to the Vascular Bed

Alfred Kahn, Jr., M.D.

Changes in the amount of blood or in the volume of the vessels that contain the blood are subject to buffering actions by the body's nervous and endocrine systems—and indirectly by the bone marrow and kidneys—and other organs. Studies of the dynamic inter-relationships are continuing to be presented.

"Body changes in Repeated Hemorrhage" is the basis of a paper by Watkins, Rabelo, Bevilacqua, Brennan, Dmochowski, Ball, and Moore (Surgery, Gynecology, and Obstetrics, Volume 139, page 161, August 1974). As they point out, if the body suddenly loses a large amount of blood, it can compensate by a transcapillary refill to the point of complete restoration of volume; thus having a low hematocrit, low oxygen carrying blood, or it could have a subnormal fluid refill to insure a higher hematocrit; both methods carry certain penalties in maintaining homeostasis when confronted with stress. These authors have reported here on the effects of repeated hemorrhages. Four human volunteers were used. Various parameters were studied resulting from three different bleeds; 44% to 52% of the red cell volume was removed. This induced one major compensatory change: "an increase in oxygen extraction by the tissues, associated with an initial maintenance of blood volume lower than normal by virtue of incomplete transcapillary refill." The peripheral resistance did not notably alter. A trend toward metabolic alkalosis was noted.

Vatner (Journal Clinical Investigation, Volume 54, page 225, August 1974) has reported on another aspect of the relationship between the blood and its container entitled "Effects of Hemorrhage on Regional Blood Flow Distribution in Dogs and Primates." The studies were made in fully conscious dogs and mildly nar-

cotized baboons. The principal aim was to study the reflex adjustments to hemorrhage; the authors specific objective was to determine the extent of response to hemorrhage in the vascular bed of the mesenteric, renal, and iliac beds and to determine what mechanisms were used to bring about a response in these three areas. In normal conscious dogs, the effect of hemorrhage on the heart was to decrease the coronary blood flow up to 39%; vascular resistance increased from 2.65 to 3.38 MM Hg/cc/min. With further bleeding the coronary flow fell to 47%. The mesenteric and iliac vascular beds followed the same pattern as the coronary vascular bed with drops in flow for the mesenteric from 305 to 256 cc/min. and iliac from 113 to 90 cc/min. Resistance increased in the mesenteric and iliac beds. The studies of the renal bed showed distinct differences from the other two general areas. With mild hemorrhage, the renal blood flow increased 15% and resistance fell by 13%. In more severe hemorrhage in which hypotension was obtained, the same general pattern obtained with an 11% increase in flow and resistance decreased by 31%. Alpha receptor blockade using Phentolamine was tried during these experiments. It had no effect on renal vasodilation; it decreased slightly the coronary resistance; it reduced the resistance in the mesenteric and iliac bed moderately. Beta adrenergic blockade with propranolol was also used with insignificant changes; the same was true with cholinergic blockade with atropine and histaminergic blockade with tripeleennamine. Of importance was the effect of prostaglandin synthetase blockade; indomethacin was used, and it was found to reverse the hemorrhage induced renal vasodilation and to produce vasoconstriction. Very severe hemorrhage tended to abolish renal vaso-

dilatation in contrast to the so-called auto regulatory changes in milder hemorrhage. It is apparent from these studies that the body tries to perfuse the kidney at the expense of the other vascular beds studied here. Furthermore, the renal vascular response is probably due to prostaglandin.

Congestive heart failure induces changes in vascular tone and this was the subject of a report by Zelis (Journal of Clinical Investigation, Volume 54, page 219, August 1974). The classic teaching has been that in congestive heart failure venous tone increases due to a heightened sympathetic activity. More recent studies have questioned this concept. Zelis studied eighteen normal volunteers and ten patients with con-

gestive heart failure due to rheumatic heart disease. The venous volume of an extreme of both groups was measured and the patients had a lower venous volume indicating increased venoconstriction of the extremity. Phentolamine, an alpha adrenergic blockage drug, was given to both groups and it did increase the venous volume in patients suggesting that there was some effect of the autonomic system on the peripheral nerves in congestive failure. Another substance, sodium nitrite, was also used as a trial but it did not produce significant results. The author concluded that "clinically undetectable edema and elevated tissue pressure" may account for some of the lowered venous volume in the extremities in congestive heart failure.



THINGS



TO

COME

Hair Transplant Symposium and Workshop

The American Society for Dermatologic Surgery and the American Academy of Facial Plastic and Reconstructive Surgery, Inc., are co-sponsoring the second annual Hair Transplant Symposium and Workshop. The conference is designed to offer an opportunity for the exchange of ideas among various disciplines and to present the latest advances in techniques on hair transplantation. It will be held February 14th and 15th, 1975, at the Stough Dermatology and Cutaneous Surgery Clinic, Doctors Park, Hot Springs, Arkansas 71901. Attendance will be limited. Faculty will include dermatologists, otolaryngologists, regional and general plastic surgeons. For further information contact: D. B. Stough, III, M.D., Program Director (address listed above).

Institute for Pediatric Radiology

The Institute for Pediatric Radiology and Charles E. Shopfner, M.D., will present a postgraduate course entitled "Current Status of Pedi-

atric Chest Radiology", February 22-23, 1975, at the Marriott Hotel in New Orleans. This intensive course in radiological procedure and diagnosis is designed to meet the needs of family physicians, pediatricians, and radiologists. This course is approved by the American Medical Association for Category I of the Physicians Recognition Award, Continuing Medical Education for thirteen credit hours. For additional information write: Institute for Pediatric Radiology, 4148 North Cleveland Avenue, Kansas City, Missouri 64117.

International Academy of Pathology

The 64th Annual Meeting of the United States-Canadian Division of the International Academy of Pathology will be held at the Marriott Hotel in New Orleans, Louisiana, March 4-8, 1975. Further information about the meeting may be obtained from Dr. Leland D. Stoddard, Department of Pathology, Medical College of Georgia, Augusta, Georgia 30902. Telephone AC 404 722-1111.

1975 Tri-State Scientific Session

Current Topics in Cardiology, May 14-16, 1975. Worthen Bank Building, Little Rock, Arkansas. Co-sponsored by Arkansas, Louisiana, and Mississippi Heart Associations and the American Heart Association Council on Clinical Cardiology. Approved for 12 prescribed hours by the Academy of Family Physicians.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The Senate has overwhelmingly passed legislation that would require one-fourth of all medical and dental school graduates to spend at least two years in the nation's slums and rural areas where there are shortages of physicians.

Earlier the Senate voted down a much more sweeping bill sponsored by Senator Edward Kennedy that would have required mandatory federal service for all health professions students and national licensure and relicensure for physicians and dentists.

Hours before the first Senate vote Senator Kennedy, aware that he was losing liberal support, shelved his Health Subcommittee's \$5.1 billion, five-year bill and offered a substitute measure which was trounced 57-34. Instead the Senate adopted a measure sponsored by Senator J. Glenn Beall, Jr., (R-Md.) and went on to pass a three year, \$2 billion health manpower bill by a vote of 81-7.

The bill finally approved by the Senate was stripped of most of the controversial provisions of the original Kennedy bill and was a victory for the American Medical Association, the American Dental Association, and the Association of American Medical Colleges.

The Senate bill calls for a three-year extension of present federal programs for aiding medical education at a total cost of about \$2 billion. Capitation grants for medical schools would be continued at a high level despite the administration's request for a cutback.

The Beall substitute measure provides federal aid to medical and dental schools that agree to allocate 25 per cent of their classroom space to students volunteering to serve in areas short of medical care workers. In return for either civilian or federal service under the National Health Service Corps, the students would receive scholarships.

The Kennedy bill would have compelled all medical school graduates to serve in the shortage areas, an approach labelled a "domestic draft"

by Senator Beall and his committee colleagues Senators Peter Dominick, (R-Colo.) and Robert Taft, Jr., (R-Ohio) who developed the substitute measure.

The Senate bill does not contain the original requirement for a federally-appointed National Council on Postgraduate Education with 10 regional councils designed to deal with allocation of speciality training slots and foreign medical graduates. The Senators contended this was too heavy an involvement of the federal government.

Another casualty of the Senate voting was the proposal for federal standards for licensing and re-licensing physicians and dentists, a plan that stirred wide protest within the professions.

The Maryland Senator's bill represented a middle ground on financial help for medical schools, with the AAMC contending the amount was too low and the Administration believing it was too high.

Immigration standards would be tightened to restrict the number of foreign medical graduates under the Senate bill.

* * *

On the other side of the Capitol, a House subcommittee has approved a counterpart bill to the Senate manpower legislation that would establish federal scholarships intended to increase the number of doctors in the nation's rural areas and urban slums where there are doctor shortages.

The House subcommittee's bill authorizes \$240 million over three years for National Health Service Scholarships paying \$9,200 to \$9,500 a year to cover the cost of a medical education.

In return, the scholarship recipients would have to spend two to four years serving in areas with doctor shortages. Non-scholarship students who volunteer to practice in areas with doctor shortages would receive a guaranteed income of \$28,000 a year until they get their practices started.

The bill would also give medical schools a grant of \$2,100 a year for each student—\$400 less than the schools now receive.

But any graduate who does not practice in an underserved area would have to repay the government the money given to the medical school.

Though the House bill differs sharply from the Senate version, particularly the Senate provision forcing medical schools to have one-fourth of their classes on federal scholarships requiring two years of practice in underserved areas, the House subcommittee Chairman, Paul G. Rogers, (D-Fla.), believes the difference can be resolved when the two bills go to conference.

* * *

Undaunted by collapse of the National Health Insurance (NHI) measure in the House Ways and Means Committee in late summer, Senator Russell Long, (D-La.) is forging ahead with plans to ram a bill through the Senate in the strained atmosphere of a "lame duck" Congress. Long is Chairman of the Senate Finance Committee and sponsor along with Senator Abraham Ribicoff, (D-Conn.) of a NHI plan featuring Social Security financed and operated catastrophic health insurance plan for all. The Long-Ribicoff bill enjoys the official support already of 25 Senators and rates some chance of Senate passage.

But the chances of passage of a version of such a Senate bill by the House in a "lame duck" session after the November elections is considered extraordinarily slim.

* * *

President Ford's long-heralded summit economic conference produced relatively little talk about health care costs and inflation, despite the fact that HEW Secretary Weinberger has of late frequently sounded such an alarm.

Nor was there any indication during the Washington parley that the Administration was considering controls at this time, although Senate Majority Leader Mike Mansfield, (D-Mont.) urged the 800 delegates to request such controls.

However, it became clear to conference observers that the President will ask Congress to approve certain but unspecified tax changes and to cut the federal budget to combat inflation.

American Medical Association President Malcolm C. Todd, a delegate to the summit conference, said that he agreed with the President with respect to avoiding controls at this time—"particularly discriminatory cost controls."

"Every American, every physician, has the duty to assist in solving the number one problem of the nation—inflation," Dr. Todd said, noting that the AMA has repeatedly stressed the need for restraints by physicians in avoiding unjustifiable charges and fee increases.

A summary of the earlier pre-summit session on health was presented by Michael Zubkoff, Professor of Health Economics at Meharry Medical College and Vanderbilt University. He stated that "it is generally recognized that the health sector is both a hostage and a cause of inflation."

According to Professor Zubkoff, the pre-summit meeting had determined certain "structural defects" in the health care delivery system which included:

"Fee-for-service payment for physicians and cost-plus reimbursement for hospitals . . . encourages cost growth.

"First dollar insurance coverage reduces cost-consciousness by consumers.

"Consumers lack knowledge to become aggressive, informed purchasers of health care.

Among the "common themes" stressed at the pre-summit health conference, Zubkoff said, were that the federal commitment to health care should not be reduced; that structural reform is needed; and that existing incentives and regulatory mechanisms are inadequate.

"There was a definite lack of a widespread consensus on solutions to cost problems in health during the pre-summit meeting," Zubkoff told the summit meeting.

While pleased that President Ford had not called for wage-price clamps by the federal government, Dr. Todd at the same time criticized the Administration for "singling out" health by "annualizing" monthly consumer price index levels. The practice of projecting the yearly increase on the basis of what happens during one month or several months has been followed only on "health" by the HEW Department so as to bolster its contention that the health segment should be isolated for controls, Dr. Todd charged.

The AMA President noted that in the past three years physicians' fees have risen 17.6 per cent compared with 22.9 per cent for the economy as a whole and, for example, 32.9 per cent for legal charges.

Suggested steps to curb medical costs, listed by Dr. Todd, were pre-admission testing; expansion of ambulatory care services; earlier discharge from hospitals; avoidance of unnecessary hospitalization; reducing wasteful testing, prescribing and treatment; and decreasing the cost of malpractice insurance.

In addition, Dr. Todd said, there must be incentives to produce more family physicians and to plan for needed specialists only.

"Perhaps physicians should attempt voluntarily to guide their fee-setting decisions by tying their charges to the consumer price index levels and not exceeding them", Dr. Todd suggested.

* * *

A wide range of health care related subjects were discussed at a recent meeting between an AMA delegation and Health, Education, and Welfare Secretary Caspar Weinberger.

Malcolm Todd, M.D., President of the AMA, said the Secretary and his aides were told that the AMA desires the best possible national health insurance (NHI) program that can be worked out, but cautioned against any hurry-up approval in an emotionally-charged Congress late in the session.

Dr. Todd said he emphasized that the number one problem facing the nation at present is inflation and that therefore any NHI program should have a minimal impact on this problem. AMA officials urged that NHI be kept outside of the Social Security Administration.

The AMA delegation urged that controls not be reimposed on the medical profession, citing the AMA's urging of moderation by physicians to keep fees in line with expenses.

Other subjects at the meeting included manpower legislation, and Current Procedural Terminology.

The AMA delegation included, in addition to Dr. Todd, Richard Palmer, M.D., Chairman of the AMA Board of Trustees; Russell Roth, M.D., Past President; William Holden, M.D., board member; Ernest Livingstone, M.D., Chairman of the Council on Legislation; James Sammons, M.D., Executive Vice President Designate; Joe Miller, Deputy Executive Vice President; Whalen Strobhar, Assistant Executive Vice President; and Harry Peterson, director of the legislative Department.

* * *

The Food and Drug Administration is planning a letter to physicians alerting them to a series of studies to be published in *Lancet*, the *British Medical Journal*, that finds a higher-than-normal incidence of cancer of the breast among women age 60 and older who have been treated with Reserpin for high blood pressure. A panel of experts appointed by the HEW Department will review the data.

* * *

The Food and Drug Administration has indicated to Congress it will order warning labels placed on oral diabetic preparations when a new study of the drug's safety and efficiency is published soon.

Alexander Schmidt, M.D., FDA Commissioner, told the Senate Monopoly Subcommittee headed by Senator Gaylord Nelson that the FDA endorses a 1970 study by the University Group Diabetes Program which found that the drugs (tolbutamide and phenformin) were linked with a heart disease death rate twice as high as for diabetics taking insulin or no drug at all through diet.

Within a few weeks, an 18-month audit of the 1970 study is due to be published and apparently it backs up the major findings of previous study. The audit is being prepared by a special panel of the Biometrics Society.

Law suits challenging the FDA's right to impose warning labels have deterred the agency from action to date, Dr. Schmidt told the Subcommittee. He said many physicians have something close to a "religious belief" that the oral diabetic preparations by lowering blood sugar decrease the likelihood of cardiovascular complications among diabetics.

Major opponent of relabeling is the Committee on the Care of the Diabetic, composed of some 180 physicians. The issue has proved a serious controversy among specialists in the treatment of diabetics, with experts taking both sides.

The FDA is relying on the audit to strengthen its hand sufficiently in the legal fight to allow it to go ahead with warning labels, but the prospects are that the actual implementation of such an order will be tied up in the courts for some time.

Physician's Opportunity Fair

The Arkansas Medical Society, the University of Arkansas School of Medicine, and the Arkansas Caduceus Club sponsored the first Physicians' Opportunity Fair at the University of Arkansas Medical Center, October 23, 1974. The day was set aside so the medical students, interns and residents could become more aware of the opportunities for medical practice in the State. Representatives of thirty-four communities were on hand to greet the students.

Overall reaction from the communities, including some physicians seeking associates, and the students was excellent. Most felt the "Fair" was long overdue and that it was a natural way of opening avenues for communication between interested parties. Comments from many of those involved indicated that the event, largely the effort of the School of Medicine, will probably become an annual one for the State.

Prior to the visiting which took place between the students and community representatives, Medical School Dean Thomas A. Bruce, M.D., and the University's Vice President for Health Sciences, James L. Dennis, M. D., opened the formal program with welcoming remarks and their insights in recruiting new doctors. Mrs. Don Pennington, wife of Don Pennington, M.D., of Clarksville, presented a wife's views on life in a small community. Mr. John McIntosh, field representative of the Medical Society, spoke on the Society's Physician Placement Service. Dr. Ben N. Saltzman, head of the Department of Family and Community Medicine at the Medical School, spoke on "Why I Chose a Small Town and Remained There for More Than Twenty-Eight Years." The text of Dr. Saltzman's speech is reproduced as follows:

Why I Chose A Small Town and Remained There for More Than Twenty-Eight Years

Ben N. Saltzman, M.D.
Little Rock, Arkansas

When I was asked to speak on this subject, I recalled that I had made similar talks almost twenty-four years ago. I had become involved in the problems of rural health and had taken the opportunity to speak to various groups on the subject.

In digging through my files, I found that my old speeches said the same things I am saying today. They served to refresh my memory and made me glad that I preserved them. They vividly brought back experiences that have been invaluable to me. I hope that I can impart to you some of my feelings. I will quote at times from my old speeches.

The end of World War II found me in the Panama Canal Zone ready to leave active duty with the Medical Corps of the Army of the United States more than twenty-eight years ago. However, it was very difficult to decide my future course. I was offered security of a sort by having the opportunity of remaining in the army

or with the Canal Zone under Civil Service. Both provided an excellent type of socialized medical practice with regular hours, fair pay, and freedom from worry in those unsettled times.

But even in those days the idea of socialized medicine was distasteful to most physicians and to myself. I had had over four years of regimentation and letter writing to superiors and felt that there must be more to life than that.

The idea of specialization appealed to me as it did to many doctors at that time. My particular field of interest was psychiatry. I held a M.A. degree in psychology from the University of Oregon, acquired before the M.D. degree, and I believed that postgraduate work in psychiatry was indicated.

My wife's brother-in-law, a physician in Batesville, Arkansas, brought the matter to a head. He phoned long distance stating that the up-and-coming town of Mountain Home, Arkansas, needed a doctor; and that the citizens were will-

ing to go to great lengths to make things suitable for good medical practice. There was no hospital, but a modern office would be provided and equipped; a home would be made available and waiting in those homeless times; and the clincher, a new car would be ready for me. I would, of course, have to pay for those things later, but all I had to do right then was to go to work.

This was general practice, and I still wanted to specialize, but a good husband discusses major problems with his wife; and since Betty was with me at the time, we had a lengthy discussion. It went something like this: "This seems to be a good proposition," I said, "but I still would like to be a psychiatrist." Betty asked, "When do you plan to start earning a living?"

I called her brother-in-law back, and in a few weeks found myself in Mountain Home. It was a pleasant little town of about 1,200 people surrounded on all sides by gravel roads and friendliness. Except for a few minor differences, everything in Mountain Home was as depicted to me. The differences were: there was no modern office available and equipped; there was no home to be found in the town; and my inquiry as to a new car was met with expressions of great glee and wonderment.

I later learned that the promises had been made by a prominent citizen who was slightly miffed at the town's only active physician and decided that he needed competition.

However, all was not lost. Dr. Elisha Gray, a physician who was retiring because of ill health, came to the rescue. He turned his small office over to me; wrote to all his patients announcing my arrival; and acted as my sponsor and friend. All my savings went into the purchase of a small house still in the process of construction. My old car had to do for another year. Sleeping quarters were established in the back of the office. It was four months before Betty and my baby daughter, Sue, could join me in our new house.

I have never regretted my decision to stay, despite the many initial disappointments. The people of the community took to me, and I took to them. I believe that the friendliness shown me from the first was the most important factor in this decision. Perhaps this town was unique, but in later years, many strangers have remarked re-

peatedly upon the same feeling of friendliness. My sponsor was of inestimable help in my professional and social contacts.

It was all work right from the beginning. There was soon no lack of patients. My difficulty was in being able to care for them. The small office would quickly fill up early in the morning, and then would come a message of some emergency 20 miles into the country. While I did not make calls on horseback, the condition of the roads was such that a horse would have been welcome. The life of my tires averaged 300 miles each. I would leave a dozen patients sitting in the office and tear out on this emergency to find that the individual had been chronically ill for many years but felt that he ought to give the new doctor a chance to cure him. Besides, as he told me, "When I want a doctor, I want one right now!"

I tried to be a good old country doctor by developing a fatherly attitude toward my patients, but the role had its drawbacks. I recall a patient who came to me soon after I opened my office. Her ailments were not serious. In my most dignified and "fatherly" manner, I reassured her telling her she did not need a long list of expensive procedures that she had outlined. Yes, I was very much the fatherly physician. I even patted her hand before she left the office. The next day it was all over town that "the new doctor had made a pass at one of his patients." In my own defense, I insisted that she was not even my type. Perhaps I was not the type to be a "good old family doctor."

However, it was soon evident that I was the type to become a specialist, though an involuntary one. Obstetrics as a specialty had never appealed to me; but it appeared that having babies was the principal occupation in this area. I was soon delivering as many as four babies a day in the homes. I carried a portable delivery table and sterile gowns and instruments. At times a nurse helped me. Soon I gained some dubious fame for my ministrations. I was actually being preferred to the numerous non-licensed midwives who flourished in the area at that time.

Those house calls made worrisome days for me. Day and night I would sit in the homes for hours at a time, waiting for the moment when my meager skill was needed. Meanwhile, in my

office, patients came and went without seeing a doctor.

In most rural communities, the prevalent idea was that the doctor should come to the home rather than that the patient should come to the office. My community was no exception. Eighty percent of my house calls were useless and costly to the patient because of time and distances involved.

The older practitioners had acquiesced to this custom, because people did not demand as much medical care as they do today. Offices were not equipped as diagnostic centers. The physician was as much at home on the road as he was in his own office. I knew I could practice as good a brand of medicine as my older colleagues without diagnostic tests and x-rays. But I felt that this was being unfair to my patients and certainly did not make use of the training that I had received. There were many skills that I had picked up in medical school, in postgraduate training, and in the army that I wanted to put to use.

Within six months a system of modernization was instituted. The office was remodeled and a laboratory was installed. A new x-ray machine was an impressive addition. Two rooms were added for office care of maternity cases.

I never refused to go on a house call, but in each instance where the call was unnecessary, the advantages of office care were pointed out. My patients quickly saw those advantages. More certain diagnosis and treatment at less cost seemed to be much more sensible. I was soon able to see many more patients with better results.

The practice continued to grow to the point where there was no rest for me day or night. When the office was closed, the telephone and door bell rang continuously. There was no protection against these two demons. One Sunday night about 10:00 p.m. the door bell woke me from a much needed nap and an elderly lady greeted me at the door. "I want you to see my grandson," she said. "I saw that the office was closed so I came over to the house. He has had the 'athlete's foot' for about a year, but your office is always full in the daytime, so I brought him over now. I knew you wouldn't be busy." Quite often I would be awakened at 5:00 a.m. by someone going to work who wanted to be

sure that I would see his wife later that day when she came in.

It was soon apparent that I would need help. I acquired an excellent associate, but with the two of us working together, the practice more than doubled. There was no relief in sight. We provided modern medical care and our patients asked for more. It was apparent to my associate and to myself that we needed a hospital in which to practice. In addition to providing a nearby place where we could see our patients and at the same time insure adequate nursing care, we felt that a hospital could serve as a message center; thus eliminating a good part of the ringing of door bells and telephones at night.

Too, my patients were tired of being sent away to large cities for medical and surgical care that they felt could be gotten at home. The expense factor was also very important in their eyes.

I made several attempts to get the community to build a city or county hospital, but our community was not ready for such a step. The people in general did not realize the advantages of a community owned institution. The prevalent feeling was "if the doctor wants a hospital, let him build it himself." I tried to point out the advantages of a hospital open to all physicians in the area. I tried to show that a hospital should belong to the people and is the people's responsibility. The city fathers could not see it my way. Besides the city and county treasuries could not stand the cost of construction and maintenance of a hospital.

However, the need for a hospital became an obsession with me. I began to formulate possible plans for constructing one myself. I went into this very hesitantly. In the eastern part of the United States, there were many small privately owned hospitals. Quite a few had rather unsavory reputations. In most cases these were operated by unscrupulous individuals who called themselves doctors but who were in reality quacks and cultists. I knew that for this and for other reasons I would have to be particularly careful that all standards and requirements for good hospital construction, maintenance and operation were met.

Inquiries were made among physicians in the state who operated their own hospitals. They all expressed a unanimity of opinion. "Don't do it."

I was informed over and over again that all hospitals operated at a loss; that personnel problems are insurmountable; that administration will take time away from the practice of medicine; and that it is impossible to meet all the state's requirements. Besides, the entire proposition can lead to an early grave.

I realized that these men spoke the truth, but I felt that the grave would be "led to" just as early, the way things were going then. I found that the bank would lend me several thousand dollars at 6% and with a lien against anything I could ever hope to own. Several friends and some insurance policy loans increased the basic fund. So with crossed fingers and high hopes I started the construction of a twelve bed hospital. It was built from plans formulated while waiting for those ever recurring "blessed events." It was built around my original small office so that an established location would not be changed.

There were moments of despair when it seemed that all the necessary regulations could not be met; when there were material shortages; when funds evaporated; and later when staffing and training seemed all but impossible. But in June of 1948 the hospital was completed and open house was held with every bed in the hospital filled.

The hospital had met all state requirements. It was approved by the American Hospital Association and the State Hospital Association. My associate and I set up standards of practice that would preclude any criticism. The hospital was open to all reputable physicians and surgeons in the area. The only surgery that would be done would be that for which the physician was well qualified.

The hospital consisted of twelve, small, private rooms, kitchen, x-ray rooms, operating and delivery room, laundry, storeroom, utility room, linen and autoclave room, and two lavatories. I did not want lavatories in the patients' rooms because I felt that if people were able to get up and go to the lavatory, they should be able to get up and go home. The hospital was directly attached to the clinic building in which my associate and I held forth. The proximity of the offices to the hospital provided our patients with more closely supervised medical care than was possible in larger centers. To cut expenses the

rooming-in principle was applied whereby the baby stayed in the room with the mother immediately after birth. This arrangement seemed to be highly pleasing to all concerned.

The community welcomed the hospital with open arms. Patients who had always gone to the larger cities were glad to stay at home. They liked the informality of the small town, home-like atmosphere. The place was efficiently inefficient. There were no starchy rules and regulations; hence no resentments. The essential goodness of people took care of most of the regulations. Complaints were rare.

Home deliveries soon became a thing of the past. House calls were cut to a minimum. The townspeople begin to speak of a feeling of security and gratitude. Real estate men stated that more and more people were moving into the community because there was an approved hospital in town. The community had grown to a population of 2,500, but our work had been cut in half.

However, it was not all sunshine. There was a natural reluctance among other physicians in the area to practice in a privately owned hospital. There were many times when the hospital operated at a financial loss, and that loss was shouldered by ourselves. Continually changing regulations regarding equipment constituted a financial burden. Personnel turnover was a persistent headache. All these were problems that confronted me as a man of business when my thoughts and worries should have been those of a physician.

However, all was not work for a physician in a rural community. I had the opportunity to belong to many civic and fraternal organizations and to take an active part in their activities. The social life of a small community was pleasant and friendly. The happiest moments of my life were spent among the new friends that I had made.

My town has grown with the years. Today we have an excellent eighty bed community hospital. There are fourteen physicians in the town. The population is more than 5,500. Paved roads lead off in all directions, and the community is losing its rural appearance. The schools and churches are growing in size and beauty. I like to feel that I have had some part in this growth. The experiences I have related are those of one

doctor practicing in one community, but I believe that the things I have learned can apply to any community. The town that seeks a physician should do so in an organized manner. Someone responsible such as the mayor or president of the chamber of commerce should be delegated to present to a prospective physician the things that the community is willing to do to help him get started. After he gets started, he must not be worked to death needlessly. Remember, always remember, he is only human. Build a hospital if feasible. Not for the doctor, but for the community. It does not have to be big. Most failures are due to over-building. A bond issue can build a fine hospital. Remember to be friendly. Friendliness kept me in Mountain Home, and it will keep doctors in your communities.

For several years with my interest in rural health, I have been encouraging students of medicine and residents in hospitals to go to rural communities to practice; preferably to the population centers such as the county seats. Here in Arkansas we have several regional economic areas that make combined practice feasible. Many new programs are being instituted to help locate physicians in these areas. You will learn more about these programs today and in the near future. Your task will be selling your community, not only to the physician but to his wife. You must undertake the task of upgrading your community. You must help the physician get started. Don't give him anything for free. If he invests his own money and time, he'll stay. Now this is very important. Getting him is just part of the job. Keeping him is the task ahead. Bring him into your community life and make him feel that the community is dependent upon him. Don't bypass him for medical services elsewhere. Don't use him only as a first aid man. Don't resent him as being competitive to a favorite physician in your area.

Today there are many opportunities available for physicians, and most of them are high paying opportunities. It is very important that you make the physician feel that your community is unique. Money isn't everything. I repeat again, your best attribute is unadulterated friendliness. The physician will then become your friend. You need friends particularly in the middle of the night. Last month when I left Mountain Home

to join the Medical Center, my office visits took twice as long as usual. There were prolonged hand shakes, hugs, tears, and kisses. I was leaving two generations of friends. This is the sort of feeling each physician wishes to engender. It doesn't always happen.

To me, the practice of medicine in a small community was a challenge and a never-ending adventure. I felt close to my patients. I battled prejudices as well as illnesses. It was a continual fight, but it was a struggle for the common good.

I have worked hard and in a small way have been successful. The road has been rough at times, but I made my home in a fine community, and I shall return.

State Pediatric Chapter Honored

The Arkansas Chapter of the American Academy of Pediatrics has received the 1973-74 Outstanding Small Chapter Award given annually by Wyeth Laboratories. The cash award is for \$1,500.

The award was presented to 1973-74 Chapter Chairman Dr. Kelsy Caplinger of Little Rock during the Academy's annual meeting in San Francisco. The Chapter was cited for its remarkable membership record of sixty-six physicians in Arkansas eligible for membership in the Academy. Sixty-five of them are members.

Some of the Chapter's activities and accomplishments include:

Aldersgate Medical Camp — A Medical Camp to provide summer camp fun and recreation for children with medical and orthopedic handicaps, founded and operated for the past four years by the Arkansas Chapter. Members of the Medical Camp Committee, of which Dr. Caplinger was chairman, included Drs. Robert E. Glenn and John A. Teeter, both of Little Rock.

Early and Periodic Screening, Diagnosis, and Treatment Program — The Chapter, working with the State Health Department, was responsible for 10,294 children (Aid to Families with Dependent Children and foster children) under 21 years of age being evaluated under the EPSDT program. The Chapter also developed and presented a training program in pediatric diagnostic screening to over 200 public health nurses.

Adoptions — The Committee on Adoptions and Dependent Care has developed a pamphlet "Adoptions in Arkansas" which defines State law

Physician's Opportunity Fair 1974



Medical School Dean, Thomas A. Bruce, M.D., (left) discusses Fair with interested county judge.



Mrs. Louis K. Hundley, Caduceus Club Director (pen-in-hand), checks the door prizes — for students only.



Dr. Charles Wilkins of Russellville (center) discusses opportunities at the Millard-Henry Clinic with students.



Dr. George Wright of Hope (left) telling of his community's need for additional family practitioners.



Judging by the crowd, the medical students were very interested in what the communities have to offer.



The good press coverage (see camera) should help make the "Fair" an annual event.

and identifies agencies. It has been distributed statewide to all interested persons.

Other Activities — The Chapter has also testified in support of a newborn insurance bill, actively planned and assisted in the "Every Child in '74" statewide immunization campaign, participated in the 1974 American Academy of Pediatrics Poster Contest, and collected 215 pounds of medical supplies for the Managua relief effort.

1974-75 Chairman of the Arkansas Chapter is Dr. Betty Lowe of Texarkana, who was chairman-elect in 1973-74. Secretary-Treasurer in 1973-74 was Dr. Jerry G. Jones of Little Rock.

Arkansas Poison Control Center

The Arkansas Poison Control Drug Information Center, a service of the University of Arkansas School of Pharmacy, was implemented October 1, 1974. The 24-hour service phone in Little Rock is 666-5532. An In WATS line is available for physicians' use outside of Little Rock — that number is 800-482-8948.

The School of Pharmacy, University of Arkansas Medical Center Library, and the Arkansas Department of Health have assumed joint responsibility for the Statewide coordinated Poison Control — Drug Information — Toxicology Laboratory Service. The program originated with Arkansas Health Systems Foundation, a federally funded project. Services will be available at no cost to all Arkansas physicians, pharmacists, nurses, and other allied health professionals on a 24-hours-a-day, 7-days-a-week basis.

The overall objective of the new program is to reduce Arkansas morbidity and mortality due to poisonings by providing comprehensive poisoning and toxicological data, and emergency analytical laboratory services by decreasing response time in medical emergencies. It is anticipated the Poison Control — Drug Information Center can respond to at least 80% of all emergency requests within 5 to 30 minutes. Non-emergency information will be supplied in less than 24 hours. The laboratory analysis will be completed within six hours after the sample has been delivered to the health department chemist.

Georgia Lee Tucker Honored

At the 1974 annual meeting of the Arkansas State Licensed Practical Nurses Association, Dr.

Ben N. Saltzman presented a plaque on behalf of the Medical Society to that association's former executive director, Mrs. Georgia Lee Tucker. In her many years of service, her cooperation with the Medical Society has always been outstanding. She was particularly impressive in assistance in legislative areas. She not only cooperated as the executive director of the Licensed Practical Nurses, she cooperated wholeheartedly and enthusiastically, as well as effectively. In response to the presentation of the plaque of appreciation by the Society, Mrs. Tucker has expressed her gratitude with the following open letter to the Society's members:

"I wish to express my humility and profound gratitude to the Arkansas Medical Society and to each of its officers and members individually for the high honor you conferred on me at our 1974 State Convention by awarding me the plaque and your commendation for the work I have tried to do for so many years. If I have served the doctors and the State meritoriously, it is due to their support and encouragement, as well as the other allied professional groups, the State Department of Education and our own members. I was simply a channel through which all of you made your contribution to the welfare of our people.

"I do not feel that I merit the high honor you have conferred on me, but I assure you that I deeply appreciate it and shall cherish it and the plaque as long as I live. I especially appreciate the kindness Mr. Paul Schaefer, Executive Vice President of your organization, has shown me. He has been my guiding light and the tower of strength for so many years. I have always depended on Paul and the doctors for help and they have never failed me. We are keenly aware and deeply grateful to your group for providing national speakers at our State Convention in 1968 and our National Convention in Hot Springs in 1972, not to mention the many times that members of your profession have honored us by their presence at our state and local meetings.

"With deep affection and high esteem.

Respectfully yours,
Georgia Lee Tucker
Executive Consultant
Arkansas State Licensed
Practical Nurses' Association"



PERSONAL AND NEWS ITEMS

Doctor of the Year Awards

The Medical Assistants Societies of Garland, Pulaski, and Sebastian Counties have named their "Boss" of the year. Receiving the award in Garland County was Dr. Doane Newton of Hot Springs. The Pulaski County winner was Dr. Barney P. Briggs of Little Rock. Dr. W. C. Holmes of Fort Smith was honored in Sebastian County.

State Physician Selected

Dr. Ben N. Saltzman of Little Rock was recently elected Vice President of the South-Central region of the National Association for Retarded Children at the group's meeting in Milwaukee, Wisconsin.

Dr. M. C. Hawkins, Jr., Guest Speaker

Dr. M. C. Hawkins, Jr., of Searcy, was the guest speaker at the Searcy Rotary Club recently. Dr. Hawkins spoke to the group on the subject of "Cancer."

Physicians Locate

Dr. Jabez Jackson, Jr., has joined the medical staff of the Harris Hospital and Clinic in Newport, Arkansas. Dr. Jackson will specialize in Obstetrics and Gynecology.

Dr. Robert A. Bell has located his Urology practice at the Skyline Medical Building in Russellville.

Chief-of-Staff

Dr. Paul G. Henley of El Dorado has been elected chief-of-staff of the Warner Brown Hospital in El Dorado. Dr. Henley succeeds Dr. William R. Scurlock of El Dorado.

Group Psychotherapy Association Formed

Dr. Wanda J. Stephens of Little Rock has been named president of the newly formed Arkansas Group Psychotherapy Association. The association is composed of psychologists, psychiatrists, social workers and others who administer group therapy treatment.

Dr. Diner Appointed

Dr. Wilma C. Diner has been appointed head of diagnostic radiology with the Department of Radiology at the University of Arkansas School

of Medicine. Her appointment was announced by Dr. Glenn V. Dalrymple, professor and chairman of radiology at the Medical Center.

State Medical Board Officers

Recently elected officers of the State Medical Board are Dr. Ross Fowler of Harrison, president, and Dr. Elvin Shuffield of Little Rock, vice president. Dr. Joe Verser of Harrisburg was re-elected secretary-treasurer.

Melbourne Honors Medical Professions

Dr. Harold Tatum of Melbourne was recently honored, along with other members of the medical related professions, at a dinner sponsored by the Lions Club of Melbourne.

Dr. Townsend Speaker

Dr. T. E. Townsend of Pine Bluff recently spoke on "How to Survive Parenthood" at a District Twelve Parent-Teacher Association meeting in Pine Bluff.

Dr. Tracy Honored

Dr. C. Clyde Tracy of Pine Bluff was named "boss of the year" at the annual meeting of the Pine Bluff Chapter of the American Business Women's Association.



NEW MEMBERS

Dr. Craig E. Ditsch

The Lafayette County Medical Society has accepted for membership Dr. Craig E. Ditsch, a native of Denver, Colorado.

Dr. Ditsch received his B.A. degree from the University of Puget Sound, Tacoma, Washing-

ton, in 1968. He was graduated from the University of Colorado School of Medicine, Denver, in 1972. He completed a rotating internship and Internal Medicine residency at the Baylor College of Medicine, Houston, Texas.

Dr. Ditsch is with the National Health Service Corps practicing General Medicine at the Lee Clinic in Stamps, Arkansas, with Dr. Willie J. Lee.

Dr. John William Nuckolls

Dr. John W. Nuckolls has been accepted for membership in the Jefferson County Medical Society. He is a native of Jackson, Tennessee.

Dr. Nuckolls graduated from Vanderbilt University, Nashville, Tennessee, with a B.A. degree. In 1968, he was graduated from the Vanderbilt University School of Medicine, Nashville. His straight Medicine internship and residency in Medicine were also completed there. He served in the United States Air Force from 1970 until 1972. Dr. Nuckolls held an appointment as Instructor in Medicine at the University of Washington School of Medicine, Seattle, from 1973 until 1974. He is Board Certified in Internal Medicine and a member of the American College of Physicians. He is an associate member of the American Society of Internal Medicine.

Dr. Nuckolls is practicing Internal Medicine at the Doctors Clinic, P.A., 1421 Cherry Street, Pine Bluff.

Dr. L. Milton Hughes

The Jefferson County Medical Society has added the name of Dr. L. Milton Hughes to its membership roll. He is a native of Pine Bluff, Arkansas.

Dr. Hughes received his B.A. degree from the University of Arkansas in 1964 and was graduated from the University of Arkansas School of Medicine in 1968. His internship was completed at St. John's Hospital, Tulsa, Oklahoma, and his residency work in Ophthalmology was at the Vanderbilt University Medical Center, Nashville, Tennessee. Dr. Hughes served in the United States Air Force from 1970 until 1972.

Dr. Hughes is practicing Ophthalmology at 1702 West 42nd in Pine Bluff.

Pulaski County

The following residents are new members of the Pulaski County Medical Society:

Baptist Medical Center

Steven W. Strode, Family Practice.

University of Arkansas Medical Center

Carol A. Mittelstaedt, Radiology.

Linda F. Deere, Internal Medicine.

L. L. Doss, Radiation Oncology.



ANSWER—Electrocardiogram of the Month

Interpretation:

Rate 62 PQ-0.18 QRS-0.10 QT-0.41 Axis $+120^\circ$

- 1) High junctional rhythm
- 2) Left posterior hemiblock
- 3) "Incomplete" right bundle branch block

Discussion:

The inverted P waves in II, III and aVF suggest a high junctional pacemaker. Because of the right axis deviation and RSR' pattern in this patient, some observers felt this patient to have right ventricular hypertrophy. However, the intraventricular conduction delay of 0.10 seconds makes this interpretation at least partially incorrect. Vectorcardiographic analysis demonstrated several features of RBBB including an afferent limb which is placed anteriorly. Terminal slowing is noted which is directed rightward and anteriorly. On the other hand, the diagnosis of RVH in the presence of RBBB is rarely secure. If the R' in V₁ is greater than 15 mm., this is evidence for RVH, but not diagnostic. Also, if the initial 0.04-0.06 sec QRS vector is rightward, this is evidence for RVH if seen with the previously mentioned increased voltage. However, with the right axis deviation of the mean QRS without this finding, such as this patient demonstrates, left posterior hemiblock is more likely.

In RVH with RBBB the vectorcardiogram in the horizontal plane may be helpful. However, mild RVH with RBBB changes the vector loop very little. RBBB + moderate RVH causes the initial portion of the loop to show clockwise rotation, though. In RBBB + marked RVH, there is marked anterior displacement of the QRS loop, and the entire loop is rotated clockwise. Although this patient's terminal loop shows clockwise rotation, the other features are still more consistent with "incomplete" RBBB alone. In conclusion, as demonstrated in this case, differentiation of RBBB and RVH may indeed be difficult.

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ARKANSAS MEDICAL SOCIETY
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ANNUAL SESSION
APRIL 20-23, 1975
ARLINGTON HOTEL, HOT SPRINGS

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Both often



● Predominant
psychoneurotic
anxiety

● Associated
depressive
symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor

neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive dis-

orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent

in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium[®]
(diazepam)
2-mg, 5-mg, 10-mg tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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LITTLE ROCK BUSINESS OFFICE

114 E. Second St. Little Rock, Arkansas

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Primary Hepatic Intra-Abdominal Hemangiopericytoma

Walter J. Wyrick, Jr., M.D., and Herbert B. Wren, M.D.*

Introduction: Hemangiopericytoma, a vascular sarcoma of pericyte origin, was first described by Stout and Murray in 1942 and although rare in occurrence, it can be found anywhere there are capillary vessels.³ Most of these tumors occur in the skeletal muscles and subcutaneous tissue of the extremities, but there have been 58 cases of non-uterine intra-abdominal hemangiopericytomas previously reported in the English literature.² The most common sites were in the omentum, small intestine and retroperitoneum with no previous hemangiopericytoma ever being reported originating in the liver.

Histology: The pericyte is the contractile smooth muscle cell that controls the caliber of the capillary lumen and the tumor is characterized by a proliferative growth of capillaries and capillary buds that may or may not be canalized. The tumor is primarily identified with the Laidlaw silver-reticulin stain which demonstrates the reticulin sheaths of the capillaries and shows the pericyte cells outside the sheaths. Mitotic and other anaplastic nuclear changes are present in most tumors and the aggressive nature of the tumor cannot be predicted histologically.⁴

Case History: A 71-year-old Caucasian male was seen because of a large, palpable upper abdominal mass present for six weeks duration without any specific symptoms. There was no history of exposure to industrial chemicals. Physical examination showed a 10 x 15 cm. non-tender, freely movable mass in the mid-epigastrium. Roentgenological work-up revealed a large extrinsic epigastric mass displacing the stomach, duodenum and colon inferiorly. At operation, a large tumor mass was found to occupy most of the left lobe of the liver with no evidence of other organ or lymphatic involvement.

An operative diagnosis of primary hepatoma was made and surgical excision of the tumor mass was performed. The excised tumor measured 17 cm. x 12 cm. x 9 cm. and weighed 720 grams, the final diagnosis being a hemangiopericytic sarcoma of the liver.

Natural History: A careful study of the 58 previously reported cases of non-uterine intra-abdominal hemangiopericytomas shows no predelection for sex or age. Most of the tumors have presented as asymptomatic masses, but pain, melena and obstructive symptoms have occurred. These tumors have a locally invasive pattern with a predelection for hematogenous spread. Most recurrences have been noted within 12 to 18 months, although both local recurrence and distant metastasis have been known to occur after several years following the primary treatment.⁵

Therapy: Because of the nature of its growth and a tendency for both local recurrence and hematogenous spread, the present treatment consists of radical en bloc surgical excision of the tumor. Extremity hemangiopericytomas have been treated with external radiation, but the doses required for definite palliation of extremity tumors are of a magnitude that carry a high risk of radiation injury to abdominal organs. However, if recurrence or inoperability exists, radiation therapy should be employed with shielding of the remainder of the abdomen as much as possible. There is no evidence at the present time that chemotherapy offers any major palliation for this tumor.¹

Summary: There has been recent attention in the lay literature concerning the high risk of developing angiosarcoma (hemangioendothelioma) of the liver with exposure of the industrial chemical process of connecting vinyl chloride to polyvinyl chloride. However, angiosarcoma develops from the endothelium of blood vessels

*Department of Surgery, Collom and Carney Clinic Association, P. O. Box 1409, Texarkana, Arkansas-Texas 75501.

whereas hemangiopericytoma develops from the contractile smooth muscle pericyte cells about the capillaries. A major aspect of treatment is a correct histological diagnosis as the angiosarcoma is a very malignant tumor with rapid hematogenous spread and a very grave prognosis. The hemangiopericytoma may develop slowly over months or even years with a relatively benign aggressiveness characterized by a large locally invasive tumor with a high incidence of local recurrence and a later tendency towards hematogenous spread. Hemangiopericytomas are more common in the extremities but intra-abdominal hemangiopericytomas are becoming more commonly recognized. The present treat-

ment of hemangiopericytoma consists of radical surgical excision and radiation for recurrence.

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The Availability of Medical Malpractice Insurance in Arkansas^{**}

Mr. Ark Monroe, III*

You have invited me to speak to you today about the problems which you have encountered with medical malpractice insurance. This line of insurance is one of the few which is available on a very limited basis in Arkansas. At the present time, only one carrier, St. Paul Fire and Marine Insurance Company, the designated carrier of the Arkansas Medical Society, writes this type of insurance in our state. During the past four years, many large insurance carriers which write every other line of insurance have dropped out of this market.

Since I have been with the Department, two major filings have been made by Aetna Casualty and Surety Company to increase the rates. Both of these filings were opposed by the Arkansas Medical Society. The first filing was withdrawn by Aetna following a public hearing. A year later, a new filing was made by Aetna and was denied by the Department. Following this denial, Aetna announced that they were withdrawing from the marketplace in Arkansas. I wrote the President of Aetna Casualty and Surety and told him that he had not exhausted his statutory remedies and had not appealed our denial to the Circuit Court. This prompted Aetna to make a new filing and the Department felt that some portion of the filing was justified. However, Aetna said that unless the entire filing was granted they planned to cancel all policies in existence. Following the hearing, a compromise was reached. Aetna withdrew the rate filing and stated that they would stay on existing policies but would not be in a position to write any new business in Arkansas. In a trade publication last week, I read that Aetna Casualty and Surety announced that they would not write any new medical malpractice business nationwide.

Friday a hearing was held at the department on a request for a 45% rate increase by St. Paul Fire and Marine Insurance Company. After an independent analysis of the statistical evidence, the casualty actuary with the department testified

that a 35% rate increase was justified. St. Paul has notified your society and the department that they will not continue to write this coverage unless the entire 45% is granted.

Without making a decision on the request, a comment on the seriousness of the situation is warranted.

If the Medical Society searches for a new carrier, premiums could be higher than 45% above present rates. The immediate problem is disturbing, but I am equally concerned about what will happen the next time St. Paul requests a rate increase. Will the department be able to question the carrier about the need for rate filings in this line?

I am not accustomed to insurance companies dictating specified rate increases to the people of Arkansas and it will not be tolerated as long as I serve as Insurance Commissioner.

Briefly, that is the situation in Arkansas on medical malpractice insurance availability. The key to the problem is continuous *availability* of protection for the injured person in medical malpractice claims whether it be insurance or another source.

The insurance mechanism has served a dual role in the malpractice problem. It indemnifies health care providers, thereby protecting your assets against major losses and it provides the *major* source of compensation for most patients who are injured due to a provider's negligence. Alternative medical injury compensation systems have not been seriously considered on the state or local level. Thus, the insurance plan is the primary source of protection for the injured person, and its availability is most important.

What has caused this sudden shift in availability? Does the capacity crunch exist in other states? What is being done to correct the problem? These are questions which need answers.

The sudden shift in availability is being felt nationwide and is a direct result of the medical malpractice "crisis." To the vast majority of patients, malpractice may seem no problem at all. Most people receive high quality of care and

*Insurance Commissioner, State of Arkansas, 400 University Tower Building, Little Rock, Arkansas 72204.

**Presented at the Winter Meeting of the Arkansas Medical Society, November 24, 1974, Little Rock, Arkansas.

are satisfied with it. The thought of suing the doctor or hospital never enters their minds. Most doctors and other health care providers can go through their entire professional life without being sued. Why then has the medical malpractice problem become a crisis?

Certainly, it is a problem to the patient who suffers a complication or other adverse result of treatment, whether he has only a minor injury that is not immediately repaired or whether, at the other extreme, he has been totally and permanently disabled. It is a problem to the doctor who is sued, whether he simply loses some sleep and time worrying over a small nuisance claim or whether, again at the other extreme, he loses a major malpractice suit and suffers severe damage to his emotional state, his finances and his professional career. To these individuals, medical malpractice is an important matter indeed, on a very fundamental, personal level.

If only this small number of patients and providers were affected by medical malpractice, it would be an always worrisome and sometimes tragic matter, but it would not be the national problem that it is. But the fear of being sued permeates the entire health-care community.

The problem touches almost every facet of our health-care delivery system. Costs, patterns of medical practice and forms of medical treatment, the distribution of health manpower, the relationships between doctors and patients, even confidence in equal justice before the law—all of these and more are affected by the problem.

The medical malpractice problem was so grave that in 1971, the President appointed a commission to study medical malpractice. In preparing for this speech, I have found the report of the President's Commission, which is dated January 16, 1973. I am afraid that the report has suffered the fate of most President's Commissions. It has found its way to a dusty shelf and the findings are not taken seriously by the health care providers or other groups affected by the findings.

In a conversation this week with the Executive Director of the Commission staff, I learned that the Commission recommended that the states should enact the necessary laws to implement the recommendations of the Commission. This is a laudible goal. Each of us prefer to have problems solved on the local and state levels. But how much has been done? The only pro-

posals are the rate increases which have been requested by the insurance companies. How much affirmative action has been taken by the Medical Society to prevent unnecessary medical malpractice claims and more importantly, to prevent medical injuries?

Most past discussions of the malpractice question have been little more than a search for someone to blame. What is needed to the medical malpractice problem is not a scapegoat but rational and objective analysis. We must carefully distinguish between causes and results of the problem and should focus on the disease rather than the symptoms.

The impact of medical malpractice on the health-care system is great. It contributes to the rising costs of health care; it causes alterations in the practice and delivery of health care in the form of "defensive medicine," and reluctance to act in emergencies, and in attitudes toward emerging forms of allied health personnel. The fear of litigation stifles change and innovation. It even restricts the flow of information regarding adverse medical events.

There is no question that medical malpractice has contributed to the cost of health care. On the front page of the Thursday's *Arkansas Gazette*, Dr. Malcolm Todd, President of the American Medical Association said that \$1.58 of every \$10.00 a person pays a doctor goes to cover malpractice insurance. Physicians, dentists, hospitals, and allied health personnel paid between \$200 and \$350 million for professional liability insurance in 1970. While this figure is not large when compared to the nation's total health-care expenditures of \$75 billion (only 4/10 of 1%), the overall impact on the health-care delivery system is significant.

Individual providers are understandably alarmed when one considers that they have had to increase their coverage and that premium rates have also increased tremendously. Premiums for dentists rose 115 percent between 1960 and 1970; those for hospitals, 262.7 percent; those for physicians other than surgeons, 540.8 percent; and those for surgeons, 949.2 percent.

The universal economic impact is obvious. The cost of the provider's insurance is passed on through his fees or charges and is ultimately paid either by the patient directly or through his health insurance premiums. For this reason, I have viewed all requests for rate increases more

carefully than in the past because the cost of the insurance will ultimately be borne by the patient.

A discussion of the economic impact of medical malpractice would not be complete without mentioning "defensive medicine."

There is no doubt that defensive medicine is practiced, but the extent to which it is practiced is not known. It does increase the cost of medical care, but it is doubtful that this increased cost is measurable. The most harmful by-product of defensive medicine is over-utilization of health care facilities, particularly unnecessary hospital stays. I would recommend that this problem be attacked by physician-directed regulatory efforts through hospital utilization committees.

There is little doubt that the law, lawyers and the legal system are integral parts of the malpractice problem. An articulate medical community has often charged that lawyers and the legal system are in large part responsible for this phenomenon. An equally articulate trial bar has responded with the counter charge that the growing number of malpractice claims is due to an increasing awareness on the part of consumers concerning their legal rights to redress for all kinds of personal injuries, and that, if anything, there is a wide disparity between the actual number of compensable injuries to patients and the number of claims which patients file.

The truth lies somewhere in between.

The final contributing cause which I should mention is the most obvious—patient injuries, both real and imagined.

The dramatic increases in medical malpractice insurance premiums within the past five years have been a major source of irritation to physicians and other health care providers. Explaining the actuarial details of medical malpractice insurance rate filings would not satisfy your curiosity about the need for continuous premium increases. Suffice it to say that medical malpractice insurance ratemaking is complicated by the delayed reporting of malpractice claims. As a result, the magnitude and severity of losses for a given premium year are difficult to predict with any accuracy. In turn, the rates arising from this process have frequently proven to be inaccurate.

Another reason for the inaccuracy of the rates which are requested is the lack of a central data collection office for medical malpractice experience. The President's Commission recommended

that the National Association of Insurance Commissioners work with the insurance industry to establish a uniform statistical reporting system for medical malpractice insurance and that data be reported to a single data collection agent who will compile it, validate it and make it available to state insurance regulators, carriers and other interested users.

For the past two years, I have served on the medical malpractice committee of the NAIC and our principal goal has been the creation of a central data collection office, but the industry keeps saying that the project is so immense that it will take many years. They have not even been able to agree among themselves as to how the data should be collected. These excuses made sense in 1973, but a year and a half later, they have a hollow sound.

Some individual companies have their own fairly sophisticated reporting systems, but since the total size of the market is small, any one company's data is insufficient for establishing a truly valid data base for rating purposes.

However, regulators are still being called upon to grant rate increases for specified percentages when the industry will willingly admit that insurance departments are handicapped by the lack of a central data collection agency. The industry still wants to know why no one believes them when they describe the terrible plight in which they have found themselves.

On another related subject, some of the present methods for establishing malpractice insurance rates, including groupings of physicians for rating purposes, may not be equitable for all providers or in the best interests of the public. For example, the teaching physician who has a part-time private practice does not have the same risk exposure as his colleague who has a full-time private practice. Many physicians in low-risk categories also feel that their premium rates are unfair simply because claims against them have been so few and so low.

The present rating system may cause physicians in some highrisk fields to change specialties or to retire early. High rates may also have a bearing on a young doctor's decision to enter one specialty rather than another. If physicians avoid certain specialties because of high malpractice insurance premiums, the result could adversely affect patient care.

These suggestions have merit as long as normal

market channels exist, but health care provider groups need to begin work on contingency plans to provide medical malpractice insurance in the event such insurance becomes unavailable.

The most direct solution to the problem is for the doctors to combine their buying power and seek a group plan. A group contract with accessibility and renewal guarantees would solve the availability problem for high risk or substandard doctors. No group plan will succeed without a unified decision by the state medical society to pursue this option. This concept also runs the risk of rates from the one carrier going up, as we are experiencing with St. Paul.

Second, the companies could establish a pooling arrangement which would guarantee insurance coverage for high risk doctors. The plan would be operated by companies similar to the Arkansas Assigned Risk Pool.

Third, establish a state fund which would provide insurance coverage for high risk and substandard risk doctors. Implementation of this possibility is not feasible at this time. Any fund of this nature should be designed to protect the injured party, similar to a state Unsatisfied Claims and Judgment Fund.

Besides working on contingency plans on the availability question, I would urge you to develop a formal system which would provide a just, speedy and inexpensive determination of the issues in medical malpractice claims. Society's prime concern must always be the injured patient. The patient's first need is prompt and effective remedial care. The present system is not speedy and is also expensive. The creation of a Peer Review Panel would permit an early settlement of meritorious claims and could discourage frivolous litigation. The Peer Review Panel is an administrative adjunct to the action at law. The main objective is to allow an allegation of malpractice based on substantial merit to be settled by the insurer without the necessity for the claimant to proceed to an action at law. Its procedure may be used before or after an

action at law has been filed. In the vast majority of plans, the emphasis is directed toward using the panel before the civil action has been filed. The screening panels are customarily established by medical societies in cooperation with bar associations.

I would strongly recommend that persons other than attorneys and health care providers be included as members of any mediation board or panel. The object of the panel is to provide a quick and inexpensive determination of whether or not a complaint has merit. Peer Review Panels such as this have operated quite successfully in New Hampshire, Rhode Island and Montana, and availability of coverage has not been a problem in those states since the creation of the mediation mechanism.

These are only suggestions for contingency plans in the event medical malpractice insurance is no longer available in Arkansas. I do not expect this to occur. I have asked the insurance carriers that do business in Arkansas to be reasonable and have told them that we will grant rate increases which are supported by accurate statistical data. I am hopeful current rate increase requests by St. Paul will be settled satisfactorily to all parties concerned and will not result in a greater availability problem in our state.

I am not in a position to suggest any final solutions to the many problems surrounding medical malpractice. We must remember that the problems of medical malpractice are dynamic social problems shaped by influences which we do not always have the ability to control. The creation of new organizational structures should not be looked upon as a panacea. Humble hopes and aspirations ought never to be made dependent upon elaborate organizational mechanisms. I offer these suggestions only in the spirit of good will and the common need to work these problems out cooperatively. It is only in the spirit of good will that will ultimately prove the worth of what we have begun.



Fracture of the Clavicle

R. Barry Sorrells, M.D.*

The incidence of clavicular fracture in the general population is steadily rising, primarily as a result of the increasing number of automobile, motorcycle, and bicycle injuries. Meanwhile, fracture of the clavicle remains a common athletic injury.

While the fractured clavicle is usually a simple management problem for the physician, the injury may be associated with neurovascular or pulmonary trauma and not infrequently is associated with other fractures and dislocations in the same extremity. The rare fracture of the outer clavicle is a special treatment problem, thus a thorough examination of the patient and his x-ray is mandatory.

Clavicular fracture in the child is a different management concern than in the adult since a greater degree of deformity and overriding can be accepted in the growing child with his ability to remodel bone (Fig. 1, 2, and 3). Nonetheless,

the physician should always attempt to achieve the best reduction possible within practical limits.

Most clavicular fractures can be managed conservatively, nonoperatively, and excellent

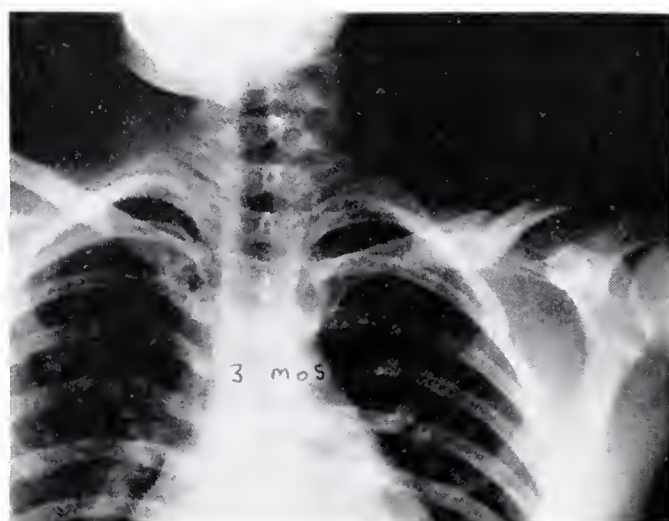


Figure 2.
Three months post-fracture with solid union.

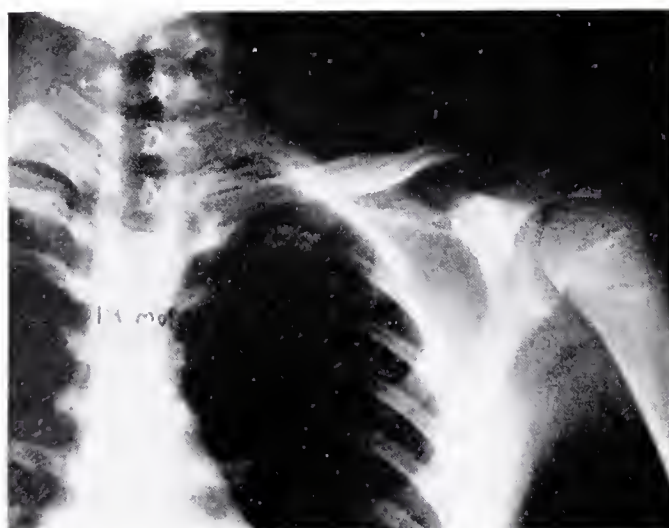


Figure 3.
Nineteen months post-fracture with remodeling.

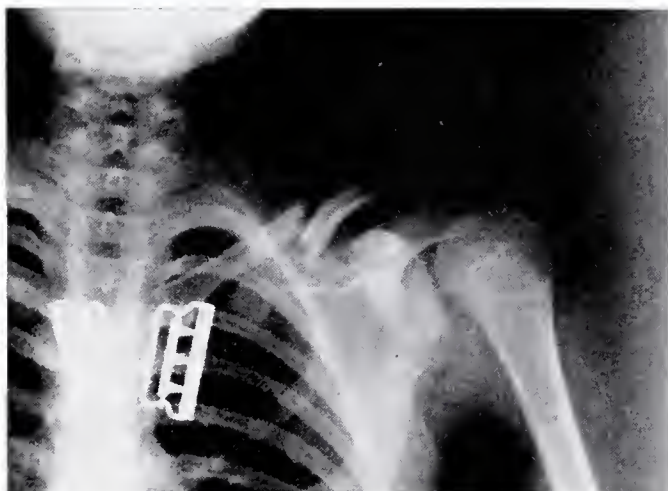


Figure 1.
Acute mid-clavicle fracture in a child.

*P.O. Box 5270, Little Rock, Arkansas 72205.

function should result when healing has been accomplished. It has been stated "a clavicle fracture will usually heal if both ends are in the same room together", and others have said "the most common cause of non-union of the fractured clavicle is open reduction". While both of these viewpoints are somewhat overstated, there should be a concerted attempt to manage clavicular fractures conservatively rather than surgically although operative intervention is occasionally necessary in the extremely comminuted fracture, the outer clavicle fracture, or with associated injury to another system.

Clavicular fractures, their mechanism of production, frequency by age group, method of treatment, and prognosis vary according to the anatomic location within the bone (Fig. 4).

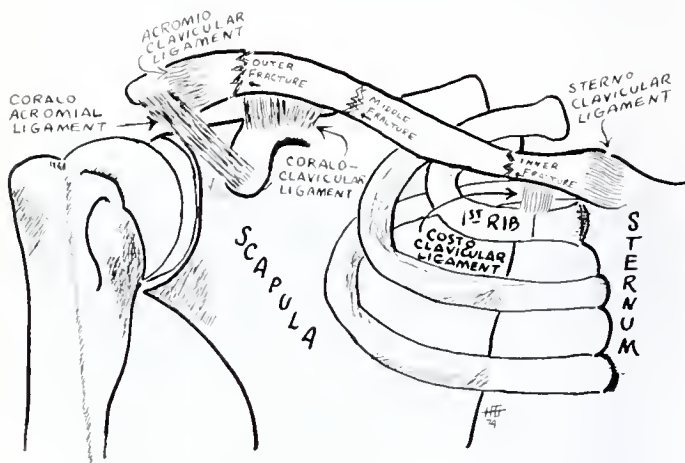


Figure 4.

Fracture of the Middle Portion of the Clavicle

This fracture, more common in children than adults, is produced by either a direct blow to the bone or may result indirectly from a driving force along the humerus compressing the clavicle and causing a spiral type fracture. If displaced, the proximal fragment lies upward and the distal fragment downward (Fig. 5). Local pain, swelling, and crepitation are present at the displaced fracture site.

Treatment of this fracture is directed at simple immobilization of the undisplaced fracture or with reduction and immobilization of the displaced fracture. Obviously, specific treatment should be rendered to any associated neurovascular or pulmonary injury.

Reduction is accomplished by bringing the shoulders up, outward, and backward. A simple method of reduction is to have the patient, appropriately medicated with analgesic, sit on a low stool. The surgeon stands behind the pa-

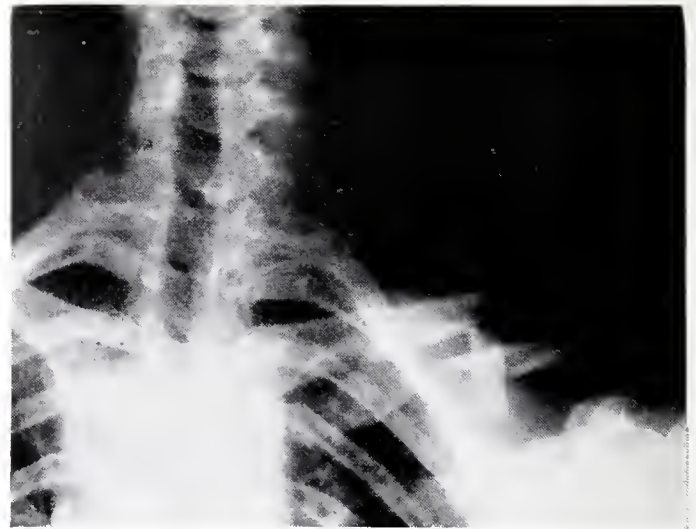


Figure 5.
Comminuted mid-clavicle fracture.

tient and places one knee between the shoulder blades. Then, with a hand on each shoulder, he pulls the shoulders upward, backward, and outward and at the same time makes counter-pressure with his knee. Adequate reduction is usually accomplished in this manner although direct manipulation of the fracture fragments may be necessary in attempt to regain the length of the clavicle when comminution is present. Anesthetic infiltration of the fracture hematoma may occasionally be required. Following reduction, immobilization can be applied with the patient in this "military posture", most commonly with a posterior "figure-of-eight" splint. This can be made of felt, plaster, or stockinette; or one may use the commercially available padded splint (Fig. 6). Immobilization should be main-

clavicle straps



Figure 6.

tained, with periodic tightening of the splint as required, for four to six weeks or until stability of the fragments is attained (Fig. 7). During this period light use of the extremities is recommended, especially in the adult, to prevent joint stiffening.



Figure 7.
Fracture healing following reduction and immobilization in "figure-of-eight" splint (same patient as Fig. 5).

Open reduction in this type fracture is occasionally necessary in excessively comminuted, shortened fractures and in the event thoracic outlet compression is unrelieved by closed means. Anatomic reduction and internal fixation, perhaps with primary bone grafting, is carried out when indicated.

Fracture of the Outer Clavicle

This fracture comprises about 10% of the clavicular fractures and is more commonly encountered in the adult than in the adolescent or child. The fracture occurs in that part of the clavicle that lies between the acromioclavicular joint and the coracoclavicular ligament. It may occur as the result of direct or indirect trauma and may be transverse, spiral, oblique, or comminuted in nature.

When the force is direct, the injury is usually only to bone, the ligaments are not injured, and displacement is minimal. Reduction is unnecessary or easily obtained and immobilization by "figure-of-eight" splint is adequate.

When the fracture results from an indirect mechanism, however, the acromion is driven downward, the coracoclavicular ligament is usually ruptured, and the proximal fragment is drawn upward and backward from the unopposed pull of the trapezius muscle (Fig. 8). This fracture is unstable, virtually impossible to reduce, subject to non-union, and is best treated surgically. Numerous surgical procedures are described, all try to restore the proximal fragment to its normal position and restore security to the coracoclavicular ligament (Fig. 9).

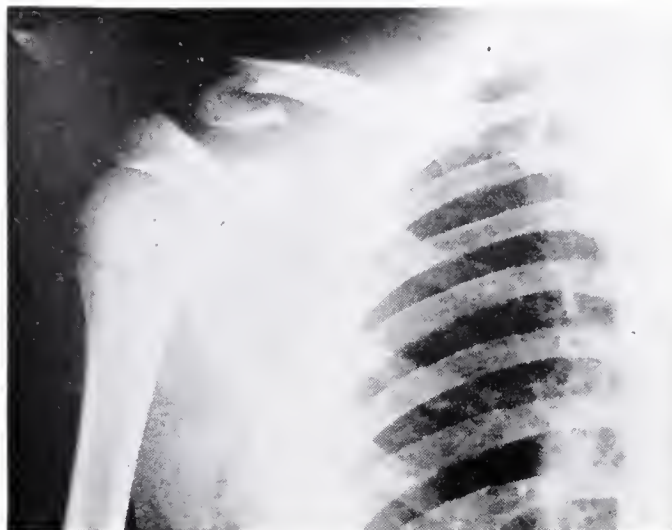


Figure 8.
Outer clavicle fracture with rupture of coracoclavicular ligaments.



Figure 9.
Following open reduction and pin fixation.

Fracture of the Inner Clavicle

This is a rare injury and the result of indirect trauma to the lateral shoulder area. Displacement is usually minimal because the costoclavicular and sternoclavicular ligaments remain intact (Fig. 10). Treatment is with a "figure-of-eight" splint.

Complications of Clavicular Fracture

As previously stated, complications associated with fractured clavicle are rare, but do occur. Injuries to the brachial plexus, subclavian vessels, pleura, and lung may occur in the acute phase. The treating physician should be alert to these possibilities and respond promptly. Late complications from exuberant callus formation and resulting neurovascular compression may be seen. Non-union may rarely occur, usually as the result of inappropriate surgical intervention, inadequate reduction, or too short a period of im-

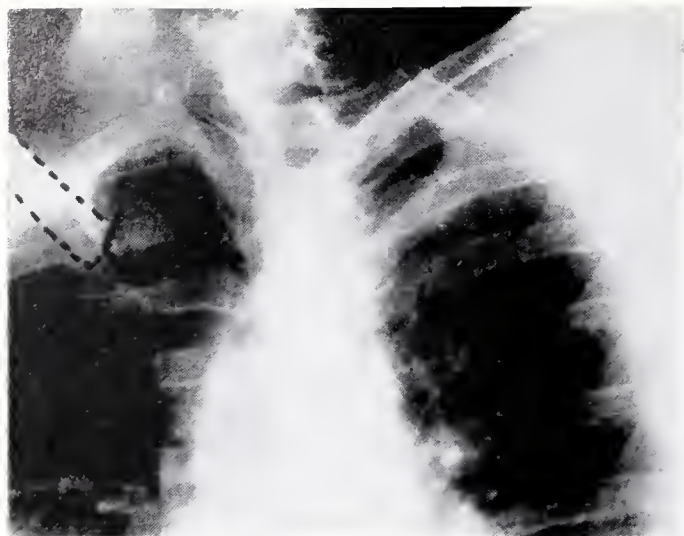


Figure 10.
Inner clavicle fracture, minimal displacement.

mobilization (Fig. 11). Surgical treatment is usually indicated in the treatment of both the acute and chronic complications described.

Summary

The physician treating clavicle fracture should be alert to the possibility of associated injury and its management. He should understand the variations in treatment and prognosis according to anatomic location of the fracture. Specifically, he should understand that fracture of the outer clavicle with associated ligamentous disruption is generally a surgical problem. Treatment of the fractured clavicle is in most instances, however, a procedure of "Office Orthopedics".

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Figure 11.
Non-union secondary to inadequate period of immobilization.

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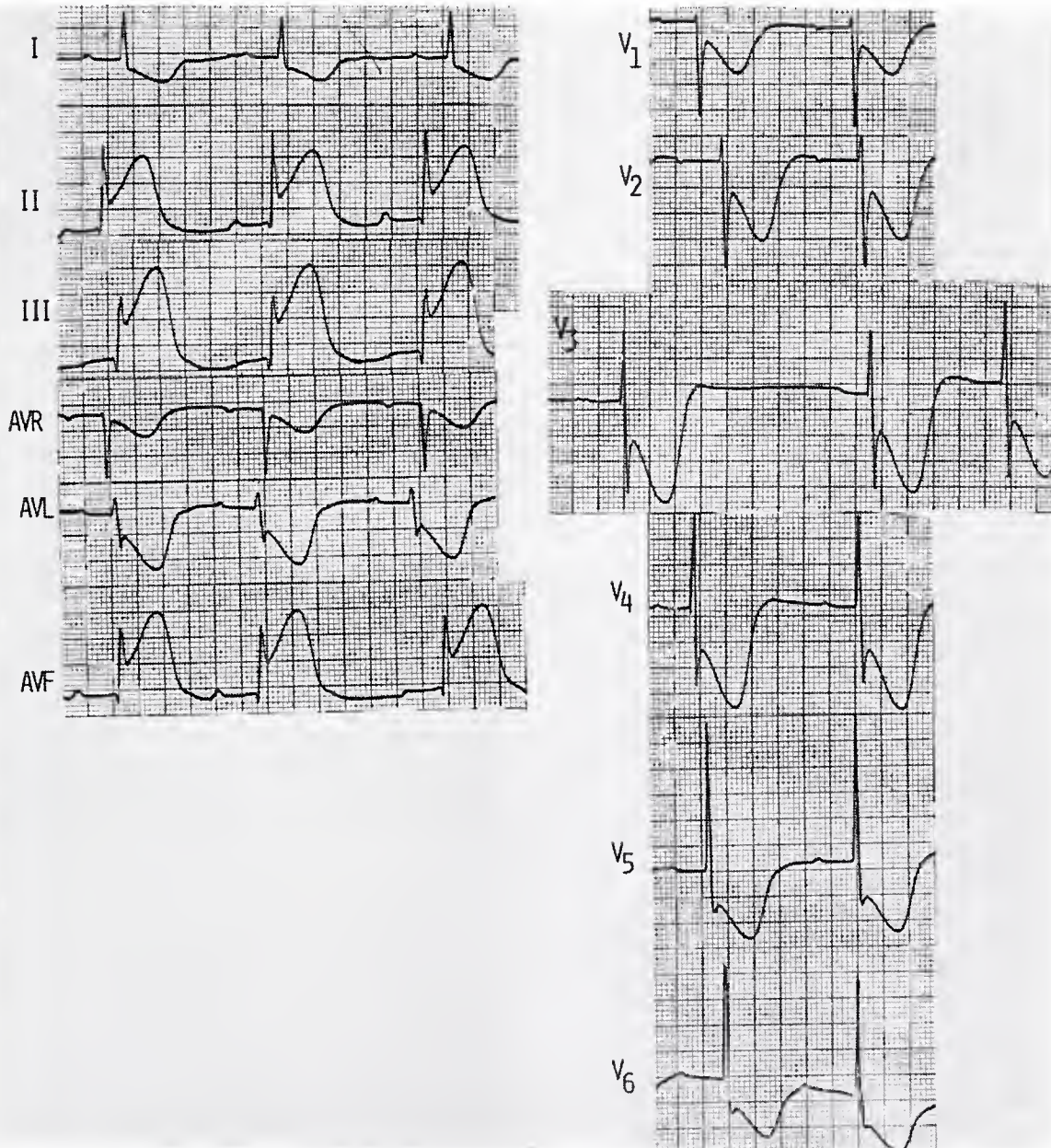
ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See answer on page 267)

50-year-old white female — chest pain.



David E. Smith, M.D., Cardiology Fellow
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Sociodemographic and Geographic Aspects of Pap Smear Utilization in Arkansas

John F. McCoy, Ph.D.,* and Ruth C. Steinkamp, M.D.**

The American Cancer Society, at both national and state levels, is working to reduce the mortality from uterine cervical carcinoma with a program of public information, education, and service aimed at increasing the use of the Pap test. The goal of the program is that every woman in the United States at risk from cervical carcinoma will have had a Pap test by 1976.¹ Information about current utilization rates is needed both to identify those segments of the female population which most under-utilize the test and to develop a baseline against which a later quantitative assessment can be performed in order to most effectively plan, manage, and evaluate the campaign.

The literature^{1,2} reports a number of sociodemographic factors which influence the frequency and regularity with which women use the Pap smear. Schroeder² has reported on a survey performed by the Arkansas Division, Inc. of the American Cancer Society to collect similar information in Arkansas. Her analysis emphasized the influence of residence. She also presented descriptive data relating age and education factors to Pap test usage, but cautioned against the unqualified use of those figures as statewide estimates. The sample size and methodology of her study precluded quantitation of racial and intrastate geographical aspects of Pap test use. The present report provides additional and currently definitive data on Pap smear utilization by age, race, family income and geographical location of Arkansas women.

Methodology

Information about use of the Pap test provided by 4,396 Arkansas women aged 17 years and over in the 1973 Arkansas Health Interview Survey³ constitute the data base for this analysis. Two basic measures of utilization were obtained from each woman, whether they had ever had the test and whether they are tested annually.

Sociodemographic factors studied were age, race, residence, and family income status. Three age groups are used, 17-44, 45-64, and 65 years and older. Residence is defined as urban for a city or town of 2,500 population or more; as rural otherwise. Family income status is defined according to federal guidelines. By family size, income is classified as "upper level" for those with an annual amount equal to or above the following: "lower level" for those below.

<i>Family Size</i>	<i>Annual Income</i>
1	\$3,000
2	4,000
3	5,000
4	6,000
5	7,000
6	8,000
7 or more	9,000

Individuals from families not supplying information were assigned an "unknown" income status.

In order to examine geographic variation within the state, sample sizes and test use rates were determined and analyzed on the basis of the eight State Health Planning and Development Districts.⁴

Results

Table I gives the sample sizes and Pap test utilization rates categorized by sociodemographic

*Director, Arkansas Health Statistics Center, 400 Southland Plaza, Little Rock, Arkansas 72205 and Associate Professor, Biometry Division, University of Arkansas School of Medicine.

**Public Health Physician Administrator, Division of Maternal and Child Health, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72201.

Table 1

PAP SMEAR UTILIZATION RATES BY AGE, RESIDENCE, FAMILY INCOME STATUS, AND RACE

	Sample Size				% Tested Annually				% Ever Tested			
	17-44	45-64	65+	Total	17-44	45-64	65+	Total	17-44	45-64	65+	Total
Residence:												
Rural	1,025	760	481	2,266	51	33	19	38	69	63	40	61
Urban	1,014	709	407	2,130	61	47	21	49	77	75	48	70
Income:												
Lower	518	442	481	1,441	42	24	14	27	63	55	36	51
Upper	1,049	579	153	1,781	65	50	35	58	80	78	54	77
Unknown	472	448	254	1,174	51	42	22	41	66	71	52	65
Race:												
White	1,766	1,281	723	3,770	59	43	23	46	76	73	49	69
Black	267	186	163	616	36	19	8	23	49	39	22	40
Other	—	—	—	10	—	—	—	—	—	—	—	—
Combined Total:	2,039	1,469	888	4,396	56	40	20	43	73	69	44	65

variables. Virtually all studies of medical service utilization conclude that age is a major determinant. That is obviously the case here in that the use of Pap test declines consistently and substantially as age increases. Because the effects of age are so strong, it is included throughout the tables to facilitate comparisons of other factors within age groups.

On a statewide basis the percent of women who have ever had the test fell from 73 in the young age group, to 69 in the middle age group, to 44 percent in the over 65 age group, with an overall average of 65 percent. The respective percents of women annually tested by age group are 56, 40, and 20, with an overall average of 43 percent.

Roughly 10 percent more urban women than rural use Pap tests, both on a lifetime basis (70 versus 61 percent) and on an annual basis (49 versus 38 percent). The Chi-square test shows that these urban-rural differences are statistically significant at the 0.001 probability level. The difference was somewhat larger in the middle age group. The urban-rural difference nearly disappeared in the older age group where the proportions of women tested annually were quite similar (21 and 19 percent).

As is common in interview surveys, a substantial fraction, 27 percent, did not provide income information. Income is a dominant factor in both aspects of Pap test use, and exerted its influence in all age groups. The upper income group generally has about 20 percent more users than the lower income group. Fifty-one percent of lower income women had been tested at least once, compared to 77 percent of the upper in-

come group. The proportion of women who are “fully protected” by annual testing was over twice as high in the upper income group (58 versus 27 percent). This is no doubt partly because of the high proportion of older women in the lower income group. It is interesting that the “unknown” group result always falls between those of the upper and lower income groups and suggests that the unknowns are not all from one income extreme.

The racial differences in Pap test use rates are just as striking as those of the income groups. Sixty-nine percent of whites had been tested at least once, compared to 40 percent of the blacks. The annual utilization rate in blacks was half of that among whites, 23 and 46 percent, respectively. Substantial race differences were evident in all age groups.

Table 2 permits overall comparison of regions of the state and differential use by age groups among regions. Consideration of overall percentages allows the following grouping of districts. Use is highest in the Central District (55 percent annual users and 76 percent lifetime users) and lowest in the Southeast and Southwest Districts (33 and 35 percent annual users and 56 and 57 percent lifetime users). The other five districts are very similar with annual use rates between 40 and 49 percent and lifetime rates between 61 and 67 percent.

Discussion

The Cancer Society survey and the 1973 AHIS are comparable in several respects, and complementary in others. Both were done in 1973, the former from March to June, and the latter from April to May. Both employed probability

Table 2

PAP SMEAR UTILIZATION RATES BY AGE AND HEALTH PLANNING AND DEVELOPMENT DISTRICT

District:	Sample Size				% Tested Annually				% Ever Tested			
	17-44	45-64	65+	Total	17-44	45-64	65+	Total	17-44	45-64	65+	Total
Northwest	234	154	101	489	56	38	24	44	71	69	44	65
White River	194	163	90	447	54	37	17	40	69	68	34	61
Central	394	251	147	792	67	32	26	55	79	61	58	76
Southeast	217	169	85	471	41	36	18	35	59	58	42	56
Southwest	191	158	119	468	51	29	10	33	71	62	27	57
East	406	290	166	862	51	38	22	41	71	69	51	66
Western	232	147	96	475	56	42	13	43	75	73	40	67
West Central	171	137	84	392	65	41	29	49	80	63	46	67
Combined Total:	2,039	1,469	888	4,396	56	40	20	43	73	69	44	65

samples selected under sophisticated sampling plans, used adequate sample sizes (501 and 4,396 women, respectively), and obtained good interview completion rates, 84 percent and 89 percent, respectively. The former study used the same age group definitions employed here, and also considered younger women, 15-16 years old, of whom there were 25 or 5 percent of the total.

The findings of the two surveys are in agreement for directly comparable results. The Cancer Society estimated that 63 percent had been tested at least once, compared to 65 percent by the AHIS. The urban and rural figures were 72 and 57 percent for the former, while ours were 70 and 61.

Schroeder's figures for percentage ever tested by age group are 69, 63, and 50; while ours are 73, 69, and 44. The differences in results from the two studies are probably not large enough for concern; if a choice had to be made the 1973 AHIS results are preferable on the basis of a higher response rate and larger sample size.

The findings that Pap smear use declined as age increased is probably due to the limited use of the test prior to the 1950's, at which time the older women were in their reproductive years, and to the more recent availability of Pap smears to younger women through family planning clinics. There may be less need for Pap tests in older women because of surgical excision of the cervix. The data is not available to allow analytical assessment of how this may affect usage.

The impact of income status on test usage is interesting since Schroeder reported that cost of the test had no effect on whether a woman ever had a Pap test. However, her analysis did not provide for other economic factors. It may be that the cost of the test *per se* is not a deterrent

to its use, but that attendant costs, such as transportation, child care expense, and loss-time from work, do result in an economic barrier to the lower income group. Our finding of less use in lower income women is more consonant with Schroeder's that those with lower educations are less frequently tested. Schroeder suggested that a racial difference exists; our data quantitatively confirms that blacks were tested less frequently than whites.

Conclusions

The Arkansas female population segments with lowest Pap test usage rates are the older, black, rural, and lower income women. Utilization is lowest in the southern districts of the state and highest in the central area.

Programs to increase the use of the Pap test in Arkansas must be broad in coverage both geographically and demographically, because there are significant proportions of women who had never been tested in all population segments surveyed. This project was supported by DHEW Public Health Service Grant No. R18 HS00980 to the Arkansas Health Statistics Center and DHEW PHS Contract No. HSM 110-71-229 to Arkansas Health Systems Foundation.

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EDITORIAL

Arkansas Poison Control Drug Information Center A Service of the University of Arkansas School of Pharmacy A 24 Hour Service*

The University of Arkansas School of Pharmacy, University of Arkansas Medical Center Library, and the Arkansas Department of Health have assumed joint responsibilities for a state-wide, coordinated Poison Control-Drug Information-Toxicology Laboratory Service implemented October 1. The program originated with Arkansas Health Systems Foundation, a federally funded project. Mr. Chet Stinnett, Pharmacist Administrator with the Health Department, is the project director. Services will be available at no cost to all Arkansas physicians, pharmacists, nurses and other allied health professionals on a 24-hours a day, 7 days a week basis.

The overall objective of the new program is to reduce Arkansas morbidity and mortality due to poisonings by providing comprehensive poisoning and toxicological data, emergency analytical laboratory services by decreasing response time in medical emergencies. It is anticipated the Poison Control-Drug Information Center can respond to at least 80% of all emergency requests within 5 to 30 minutes. Non-emergency information will be supplied in less than 24 hours. The laboratory analysis will be completed within six hours after the sample has been delivered to the health department chemist.

The School of Pharmacy Service, with Mr. Karrol Fowlkes, PC-DI Specialist, will be based on a computerized information retrieval system for rapid delivery of toxicological data. The system utilizes the UAMC Computing Facility's DEC-10 computer via an on-line computer terminal to utilize a poison information program developed by Dr. Vernon Green of Children's

Mercy Hospital in Kansas City. This tape contains 6,000 of the most commonly ingested chemicals and drugs listed as to trade name, generic name, chemical ingredient, manufacturer, symptoms of toxicity, toxicity levels, and treatment including antidotes if applicable. For natural products, it lists the common and species names, chemical constituents, symptoms of toxicity, and treatment. Using the computer listings, a PC-DI staff member can retrieve all of the above information in less than 30 seconds.

In response to a call, the PC-DI Center can also utilize the Poisindex system, a drug information scheme containing 52,000 entries catalogued on microfiche cards. This system also makes available specific managements for toxic materials as well as product identification codes. Both of the aforementioned systems will be supported by the Card Index on Toxicity of Trade Name Products published by the National Clearinghouse for Poison Control Centers and a Toxicology library.

If an inquiry to the System is of a non-emergency nature, the UAMC Library will respond to the drug information requests. The extensive resources of the Medical Center Library are the most current and complete source of drug and toxicological information in Arkansas. In addition to its permanent holdings the library has on-line computer access to Medline and Toxline, data bases maintained by the National Library of Medicine.

To further meet the requirements of this project, the library has purchased the deHaen Drug Information System, a card file on data

*LITTLE ROCK 666-5532; IN WATS 800-482-8948.

abstracted from 400 bio-medical journals. It provides pharmacological effects, toxicity, manufacturer, case studies and journal listings for drugs in research, drugs in clinical use, drugs used in combination, drug interactions, investigation drugs, clinical drug information and pesticides. An additional full-time member, Mrs. Rebekah Wiedower, has been hired as a drug information assistant to the reference staff headed by Mrs. Neil Barnhard, Chief of Library Services to the Public. The library staff has responded to drug information requests for some time, but anticipates a much greater demand for information once this program is publicized among Arkansas health professionals.

The third facet of the project, the Toxicology Laboratory service, will be coordinated by Mr. Bob Horn of the Arkansas Department of Health. The laboratory will analyze blood, urine, vomitus, and gastric lavage for identification of barbiturates, narcotics, amphetamines, salicylates, phenothiazines, alcohols, pesticides

and heavy metals on a 24 hour basis. A report will be completed within six hours after the sample has been delivered to the chemist, and the analytical results telephoned immediately to the requesting physician and/or agency. Only procedures that are widely recognized and widely accepted as being reliable toxicological methods of analysis will be used. The laboratory will maintain the capability for providing quantitative analysis of blood for barbiturates, phenothiazines, salicylates, alcohols, and pesticides and the quantitative analysis of urine for heavy metals. Upon request, the quantitative analysis for these six classes of drugs will be completed within six hours after receipt of the sample.

The laboratory will also analyze for less common drugs or harmful chemicals such as chloral hydrate, Librium®, Valium®, Placidyl®, meprobamate, methaqualone, glutethimide, and other drugs when requested. At least 80% of these laboratory requests will be complete within 12 hours after receipt of the sample.



MEDICINE IN THE



THE MONTH IN WASHINGTON

The only two crucial health bills that have an outside chance of passage in the 93rd Congress face tough sledding in the remaining "lame duck" days, mostly due to the wide differences between the House and Senate versions.

The House Commerce Committee has approved and sent to the floor for action an Aid-For-Medical Education bill requiring medical school graduates to pay back the federal government for its contribution to their education through capitation assistance or serve in shortage areas.

Another provision of the House Committee bill establishes an agency for accrediting medical residency training programs and for limiting the number of positions in each program. The total would equal 125 percent of the estimated number

of graduates from U. S. medical schools, thus imposing a ceiling on the number of slots that could be filled by Foreign Medical Graduates. Some 7,000 residencies could be eliminated if this limitation were imposed now.

The Senate has approved a manpower bill much broader in overall scope than that of the House but the Administration, the American Medical Association, and the Association of American Medical Colleges vigorously oppose both bills. As a result of this controversy and the shortage of time remaining, both health manpower bills may founder this year.

A one-year extension of present aid programs is the alternative. The AMA and others support this latter course.

Health planning bills are also pending in the Senate and House. Both bills have been sub-

stantially modified from the original versions which called for a tough regulatory structure for the health sector similar to sanctions which now govern the operations of public utilities.

The arguments of the AMA and other groups have prevailed and a rate setting provision has been struck from the House bill. However, the Senate bill still contains authority for government regulation of hospital rates.

The AMA opposes the Senate bill because:

* * The bill represents a mechanism for the regulation of the health care delivery system.

* * Control of the planning and regulation process would not be at the local level, but would be directed from HEW.

* * Health care would be subject to public utility type regulation. "There is no proven basis for adopting this extreme system of controls," the AMA asserts.

* * State legislatures would be required to adopt certificate of need legislation to implement state programs of control meeting the satisfaction of the HEW Secretary.

* * States would be expected to establish rates for all health services, which through regulation, could cover all institutional and ambulatory services, including professional charges. HEW is empowered to establish criteria respecting basic elements of the rate structures.

* * Control of the health sector would be federalized through the broad authority vesting such power in HEW.

* * The complicated planning program proposed in the bill "could delay health resource development and adversely affect health services," according to the AMA.

Similar but less strenuous objections were raised by AMA against the more moderate planning bill approved by the House Commerce Committee. "While the bill does not contain the original public utility type controls proposed, which included rate setting authority in the states, the bill does establish a controlled planning system embracing characteristics of a public utility type approach to the regulation of health services and facilities," according to the AMA.

"The bill should be rejected and the existing authorities for Comprehensive Health Planning and Regional Medical Programs should be extended until an appropriate alternative is developed," the AMA argues.

The great difference between the House and

Senate versions of both the planning and manpower bills, the opposition of almost all provider groups, plus the time bind would seem to reduce greatly the passage of either bill this year.

* * *

President Ford has indicated that the national health insurance plan he will submit to the next Congress will be similar to former President Nixon's Comprehensive Health Insurance Plan (CHIP) which was based on mandatory coverage of workers by employers through the existing private health insurance system. In a legislative message to "lame-duck" Congress, Ford made no pitch for action in the present Congress.

Meanwhile, HEW Secretary Caspar Weinberger has been meeting with principal medical and health care providers, including the AMA, in an effort to arrive at some sort of consensus with respect to a NHI bill.

The AMA has provided the Secretary and other providers with a 14-point set of principles that it believes essential in any NHI plan. Approved by the AMA Board of Trustees, these NHI guidelines are:

1) minimum federal involvement in administration of any national health insurance program

2) state jurisdiction with respect to licensure and certification of professional health personnel and regulation of insurance

3) minimum federal dollars in financing of programs for comprehensive coverage at least possible cost

4) funding through federal, state and private funds including (a) employer-employee contributions for private health insurance and (b) an individual tax credit as applied for full health care protection

5) no added Social Security tax for financing

6) no administration by Social Security

7) cost sharing by participating individuals and families and a subsidy for the indigent scaled according to income

8) use of private insurance on risk and underwriting basis

9) comprehensive coverage, basic and catastrophic, for the entire population

10) pluralism in methods of health care delivery

11) cost controls as appropriate

12) quality controls as appropriate

13) continuity of benefits

14) coordination of benefits

* * *

The Government has issued its long-promised regulations to encourage purchase of lower priced drugs for the Medicare and Medicaid programs, and introduced a new wrinkle—a drug price information bulletin to be sent to all physicians.

Major impact of the regulations—if finally carried out—would be on physicians and pharmacies dealing with Medicaid patients and their outpatient drug benefits. The inpatient Medicare program involving hospital drug purchase would be less affected. However, the long-range implications of the HEW Department's plan in event of a National Health Insurance Plan are significant. HEW would clearly attempt to extend something like the Medicaid proposal for outpatient drugs to any national program that reimbursed such costs.

The new regulations are aimed at reimbursement for the lowest price drugs available where the drugs are chemically identical. The limit is termed "maximum allowable cost," or MAC. Physicians prescribing for Medicaid patients would have to prescribe the designated drug or certify the necessity for prescribing a more expensive drug and give reasons.

HEW gave interested parties 60 days to comment on the proposals. After that, and assuming the final regulations are little changed, the only possibilities for blocking the drug pricing plan would be court action or legislation. A Food and Drug Administration spokesman told a news conference the HEW Department has "ample legislative authority" to promulgate such regulations. He estimated the plan would save federal and state governments at least \$89 million a year when fully implemented in several years.

Pharmacists would be limited to their actual acquisition cost plus a dispensing fee. According to HEW, pharmacists in many state Medicaid programs are presently reimbursed on the basis of a published wholesale price "which may be more than 15 percent higher than the actual cost of acquisition."

Under the proposal, HEW would concentrate on the 200 most widely used drugs, some 12 to 20, if all goes according to plan, would be placed on the MAC list this summer.

The reimbursement plan would have the greatest impact on drugs that aren't presently under patent protection and therefore come from several sources, about 40 of the top 200 fall in this category.

A Pharmaceutical Reimbursement Board would be set up at HEW to determine the maximum allowable costs. FDA would have to establish bio-equivalence to its satisfaction. An advisory committee would have a shot at the data and the recommendations before they were proposed formally.

The Pharmaceutical Manufacturers Association (PMA) said that though it recognizes the need to hold down federal spending, it believes many questions and problems are involved in the proposals. One is the professional role of the pharmacist and the physician in the prescribing process, according to the PMA. Another worry is the possible discouragement of innovation and improvement of drugs, PMA said.

* * *

Tax provisions that would have affected physicians and patients were dropped from the "mini-tax" reform measure recently approved by the House Ways and Means Committee, ending chances of these provisions reaching enactment any time soon.

The provisions chopped from the bill included a proposal to eliminate the present deduction for one-half of the premium cost for private health insurance up to \$150; a plan to deny business treatment for conventions or meetings arbitrarily held in exotic foreign locales; and a recommendation to place a deductible in front of legitimate business expenses for such items as professional dues, books, etc.

* * *

The federal government is now providing 33 cents of every health care dollar spent in this country, according to a unique report made annually by the AMA-Washington office.

Actual dollar outlays in any given year may vary considerably from the appropriations provided by Congress, but the appropriations figure used by the AMA gives as accurate guideline as any other yardstick available on the nation's year-to-year health spending.

During the fiscal year that ended last July, the federal government disbursed more than \$32.7 billion for health, up to \$2.6 billion from the previous year, plus more than \$12 billion for disability programs. Total spending from all sources on health was estimated at about \$100 billion.

The federal tab for the current fiscal year, ending in July, 1975, is slated to register a sharp

jump as new federal programs get going and increased overall health care costs are reflected.

The HEW Department leads the list of government health spenders with \$23.7 billion appropriated last fiscal year for its many health activities including Medicare and Medicaid. Next in line were Defense, \$3,065,274,500, and Veterans Administration, \$3,016,853,000. Fourth and fifth slots are occupied by relatively recent federal activities—the Federal Employees Health Insurance program—\$696.6 million—and the Environmental Protection Agency, \$528.9 million. Agriculture comes next at \$302.7 million for animal disease control, research, meat inspection, etc. (not counted are \$7.8 billion for health related programs of food for school children, and rural housing, water and waste disposal activities).

Medicare is the single largest federal health plan moneywise though financed out of Social Security taxes, it technically remains an appropriation that must be approved by Congress each year, cost of Medicare last fiscal year was \$12.1 billion, a \$2.5 billion increase due to increased utilization, higher costs, and the new program for the disabled, including kidney disease patients, which accounted for \$1.25 billion.

Of the Medicare total, almost \$3 billion was paid out for the supplemental insurance plan for outpatient benefits. Half of the premium is paid for by the beneficiaries.

The federal government allotted \$5.8 billion to the states for the Medicaid program for medically indigent people, an increase of almost \$1 billion due to expansion of categories eligible for such assistance. If federal, state and local funds are counted, Medicaid costs \$10.5 billion.

Mrs. Hundley Honored

At the 1974 Winter Meeting of the Arkansas Medical Society, Dr. C. C. Long, Chairman of the Council of the Society, presented a certificate of appreciation plaque to Mrs. Louis K. Hundley of Little Rock. The plaque, which was presented during the Society luncheon, read as follows:

"As a physician's wife and as a leader of the Woman's Auxiliary to the Arkansas Medical Society, Mrs. Hundley has been a source of strength to the medical profession. She has demonstrated her dedication to the private practice of medicine and to the support of its organizations.



Mrs. Louis K. Hundley

"In her position with the University of Arkansas School of Medicine, Mrs. Hundley has worked diligently to strengthen the bonds between the Society and the Medical School.

"Her personal commitment to the goals of organized medicine and her willingness to render service merit the recognition of the Council of the Arkansas Medical Society. The Council presents this certificate to Mrs. Hundley as a token of gratitude, admiration and respect."

Pharmacology and Therapeutics CME

The American Society for Clinical Pharmacology and Therapeutics now offers a Continuing Medical Education Program in clinical pharmacology and therapeutics which is directed toward practicing physicians.

The speaker's bureau of the ASCPT will provide selected speakers for participation in organized medical programs. The host organization will be responsible for providing honoraria and speaker's expenses for guest speakers. For further information contact Mrs. Elaine Galasso, 1718 Gallagher Road, Norristown, Pennsylvania 19401.



PERSONAL AND NEWS ITEMS

Dr. Ramsay Appointed

Dr. Rex C. Ramsay of Little Rock has been appointed Acting Director of the State Health Department by Governor Dale Bumpers. Dr. Ramsay is replacing Dr. John A. Harrel, former Director, who has relocated in Atlanta, Georgia, as Director of Medical Affairs at DeKalb General Hospital.

New AHEC Program Directors Named

Dr. Winston K. Shorey, University of Arkansas Medical Center Director of the Area Health Education Centers, has announced two new family practice residency program directors. Dr. George Warren of Smackover will head the program at El Dorado, and Dr. Lee B. Parker, Jr., will direct the Northwest Arkansas program at Springdale and Fayetteville.

Dr. Townsend is Speaker

Dr. T. E. Townsend of Pine Bluff, president-elect of the Medical Society, spoke on the Pine Bluff Belaire Elementary Parent-Teacher Association meeting on "Navigating and Emotions" at their November meeting.

Dr. Cathey Donates Books

Dr. Arley D. Cathey of El Dorado has donated a large portion of his personal library to the Warner Brown Hospital in El Dorado. Dr. Cathey's collection represents over sixty-five years of medical source and reference materials for physicians. Many of the volumes have an historical value.

Dr. J. H. McCurry Honored

Dr. John H. McCurry of St. Louis, Missouri, who formerly practiced medicine in Craighead County, Arkansas, for over sixty years, recently received a number of distinguished awards. The St. Louis Medical Society bestowed an Honorary Membership to Dr. McCurry, along with the best wishes from the medical profession. The Fifty Year Club of the American Medical Association presented a plaque to him in recognition of his inspiring efforts to establish the Fifty Year Club and for his leadership as founder and secretary in building up and maintaining the club's membership.

Dr. McCurry, a past president of the Arkansas Medical Society, also received telegrams, flowers,

and many birthday wishes on the 102nd anniversary of his birth.

Dr. Brown Receives Recognition

Dr. O. D. Brown of DeQueen was recognized at the recent annual meeting of the Arkansas Division of the American Cancer Society for his achievement in leading volunteers of the Sevier County unit of the society to an all time high fund-raising in the 1974 Crusade. The total amount his group raised was \$3,414.00.

Dr. Roy Serves as Host

Dr. F. Hampton Roy of Little Rock was in charge of the itinerary for Drs. Arturo Cuellar and Roger Cuellar of Santa Cruz, Bolivia, when they visited Little Rock. The doctors were in Little Rock to study eye diseases and surgery techniques as well as to explore the initiation of an eye bank at Santa Cruz.

Dr. Fulmer Robbed

Dr. John M. Fulmer of Little Rock was robbed at his residence by two men posing as deliverymen for a florist. Dr. Fulmer estimated articles valued at more than \$1,500 were stolen.

Physician Relocates

Dr. William W. Richardson has joined the staff of the George W. Jackson Mental Health Center in Jonesboro. He was formerly on the staff of the Arkansas State Hospital, Benton Unit. Dr. Richardson will be associated with Drs. Edwin F. Price, W. R. Oglesby, and James M. Sims.

Dr. Burton Opens New Department

Dr. George Burton of El Dorado has announced the opening of the Department of Ultra Sound at the Union Memorial Hospital in El Dorado.

Family Doctors Clinic Robbed

The Family Doctors Clinic in Harrison, owned by Drs. Robert H. Langston and Joe B. Wilson, was robbed of an undetermined amount of cash during a recent burglary of the clinic.

Bridge Dedicated to Dr. Robinson

Dr. G. Allen Robinson of Harrison recently had a bridge dedicated in his honor in Western Grove, Arkansas. The bridge, which is part of U. S. Highway 65, was dedicated in honor of Dr.

Robinson's many years of service as a physician and community leader to the area.

Drs. Bailey and Pappas Honored

Two Little Rock physicians, Dr. H. A. Bailey and Dr. James J. Pappas were honored at the

dedication of the new Bailey-Pappas Temporal Bone Laboratory at the University of Arkansas Medical Center. The physicians donated funds for microscopes and special equipment for the laboratory.



NEW MEMBERS

Dr. Vance Medlock Strange

The Lafayette County Medical Society has added the name of Dr. Vance M. Strange to its membership roll. He is a native of Stamps.

Dr. Strange received his pre-medical education at Tulane University in New Orleans, Louisiana, and was graduated from the Tulane University School of Medicine in 1934. He completed his internship and residency training at Southern Pacific General Hospital, San Francisco, California.

For the past thirty-eight years Dr. Strange practiced general and industrial surgery in San Francisco, and he held numerous teaching and staff appointments in the San Francisco area during those years.

Dr. Strange is now practicing general and industrial surgery at 302 Thomas Street in Stamps.

Dr. Ralph Sloan Wilson

Dr. R. Sloan Wilson has been accepted for membership in the Pulaski County Medical Society. He is a native of El Dorado, Arkansas.

Dr. Wilson received his A.B. degree from Davidson College, Davidson, North Carolina, in 1959. He was graduated from the University of Arkansas School of Medicine in 1963, and he remained there for his internship. Dr. Wilson did his residency work in Ophthalmology at the University Medical Center in Little Rock and the

University of Texas Medical Branch, Galveston, Texas.

A member of the American Academy of Ophthalmology and Otolaryngology and the Association Research of Vision and Ophthalmology, Dr. Wilson is Board Certified by the American Board of Ophthalmology.

He has been practicing Ophthalmology since 1970 in the Department of Ophthalmology at the University of Arkansas Medical Center in Little Rock.

Pulaski County

The following interns and residents are new members of the Pulaski County Medical Society:

St. Vincent Infirmary

Eddie J. Reddick, Resident—Family Practice

Baptist Medical Center

Rodney L. Griffin, Resident—Family Practice

John A. Huskins, Resident—Family Practice

Phillip L. White, Resident—Family Practice

K. K. Yen, Resident—Family Practice

University of Arkansas Medical Center

Haim I. Bicher, Resident—Radiation Therapy

Larry R. Faulkner, Resident—Family Practice

Carl C. Garner, Jr., Resident—Family Practice

Thomas H. Hollis, Resident—Family Practice

Lakhibir Kang, Resident—Family Practice

Ronald Reese, Resident—Family Practice



ANSWER—Electrocardiogram of the Month

Sinus rhythm @ 50 minute.

1st degree heart block with PR of 0.28 to 0.36 and a dropped atrial beat in V₃.

Severe ST elevation II, III, AVF with ST depression I, AVL. V₁-V₆ compatible with acute injury.

This patient transiently developed Mobitz I (Wendebach) A-V block but did not require a pacemaker. She evolved Q's in II, III, AVF of an inferior or diaphragmatic infarction.

THINGS TO COME



1975 Centennial Celebration of the Arkansas Medical Society

The Arkansas Medical Society will celebrate 100 years of physicians' service to the citizens of Arkansas during the 1975 Annual Session. The meeting will be held at the Arlington Hotel, April 20-23, 1975, in Hot Springs.

1975 Tri-State Scientific Session

Current Topics in Cardiology, May 14-16, 1975. Worthen Bank Building, Little Rock, Arkansas. Co-sponsored by Arkansas, Louisiana, and Mississippi Heart Associations and the American Heart Association Council on Clinical Cardiology. Approved for twelve (12) prescribed hours by the Academy of Family Physicians.



BOOK REVIEWS

GASTROENTEROLOGY, edited by Henry L. Bockus, Third Edition, Volume 1. Published by W. B. Saunders Company, Philadelphia, London, 1974. This outstanding text includes the examination of the patient and disorders of the stomach and esophagus. It is encyclopedic and thoroughly reliable. The contributors are outstanding individuals in their own right. The bibliographies are good. The book is well illustrated. Of particular interest in this edition is the attention paid to diagnostic procedures. No medical library is complete without this valuable reference.



PROCEEDINGS OF SOCIETIES

COUNCIL MINUTES

The Council of the Arkansas Medical Society met on Sunday, November 24, 1974, at the Downtown Holiday Inn, Little Rock. The following members were present: Long, Saltzman, Shuffield, Jansen, Duzan, Fairley, Kirkley, Gray, J. Bell, P. Bell, Burge, Moore, Jameson, Harris, Clark, Kolb, Orr, Henry, Kirby, Chudy, Wilkins, Wood, Fowler, Applegate, Verser, Hyatt, Watson and Ellis. Guests present were: Joe Scruggs, Purcell Smith, William Jones, Ken Lilly, Kemal Kutait, Mahlon Maris, Friedman Sisco, George Mitchell, Lee Parker, Harry Hayes, C. E. Tommey, John Wright, Nathan Poff, John Guenther, Raymond Biondo, James Sanders, Thomas Bruce, James Weber, Rutledge Howard, Mr. Gary Barger and Mr. Bill Dudding. Also present were Mr. Warren, Mr. Schaefer, Mr. McIntosh and Mr. Harris.

The Council transacted business as follows:

1. Chairman Long introduced the guests present.
2. Upon the motion of Jansen and Burge, the Council approved expenditure of up to \$1,500 for the production of television spots calling attention to the Centennial year of the Arkansas Medical Society.
3. Mr. Schaefer read a letter from Dr. John Harrel expressing his appreciation for the cooperation of the Medical Society during Dr. Harrel's tenure as State Health Officer.
4. Mr. Schaefer called the Council's attention to the importance of county medical societies having their constitution and by-laws on file at the State headquarters. He asked the councilors for their assistance by encouraging the county medical societies to adopt and file a constitution.
5. Upon the motion of Kolb and Kirby, the Council approved the action of the Executive Committee as follows:

A. After receiving notification that St. Paul

Insurance Company would not renew malpractice liability insurance after December 31, 1974, directed that other insurance companies be invited to discuss a group malpractice plan for the members.

- B. Voted to ask the Insurance Commissioner, Ark Monroe, to speak at the winter meeting luncheon.
- C. Agreed to try to reach an agreement with St. Paul at the Insurance Commissioner's hearing on November 22nd.
6. Heard a report from Mr. Gene Warren on the hearing held November 22nd in the office of the Insurance Commissioner on St. Paul's filing for a rate increase. The Council voted to ask Mr. Warren to continue to try to reach an agreement with St. Paul which would protect the citizens of Arkansas from undue costs and would continue protection of the physician.
7. Heard a report from Dr. Shuffield, Chairman of the Legislative Committee, outlining positions on legislation as recommended by his committee at a meeting earlier in the morning. The Council approved the report upon motion of Kirkley and Clark.
8. Heard Mr. Gary Barger, President of the Junior Class at the University of Arkansas School of Medicine, urge the substitution of Part 1 of the Flex examination for the present Healing Arts Board examination. After lengthy discussion and explanation by the Secretary of the State Medical Board, Dr. Joe Verser, the Council voted to recommend keeping the requirement for passing the Healing Arts examination.
9. Upon recommendation of Dr. Harry Hayes, Chairman of the Insurance Committee, the Council voted to recommend that physicians and hospitals adopt the AMA "Current Procedural Terminology" (CPT).
10. Approved the Society sponsoring a Balkan Adventure proposed by INTRAV to depart for the Balkan area in July 1975.
11. On recommendation of Dr. Lee Parker, Chairman of the Committee on Medical Education, the Council voted to attempt to have Arkansas Medical Society educational

programs accredited so that physicians could receive credit on their continuing education programs under any re-licensure provisions adopted in the future.

12. Dr. Ken Lilly, Chairman of the Ad Hoc Committee to Repeal or Amend PSRO, requested permission to send out material to patients describing the disadvantages of PSRO. Upon the motion of Saltzman and Kirkley, the Council voted to request the committee to submit the material to be sent out to the Executive Committee for approval prior to distribution.
13. Upon the written request of Dr. Robert Bransford, Chairman of the Council Committee on Emergency Health Services, the Council voted to discontinue the Committee on Emergency Health Services because the Society has a Sub-Committee on Traffic Safety, which can adequately carry on the programs normally assigned to Emergency Health Services.

The Council adjourned and reconvened in Executive Session.

In Executive Session, the Council transacted the following business:

1. The Council Chairman discussed an agreement reached with employees regarding personal use of Medical Society automobiles. The Council voted to approve an agreement whereby employees would reimburse the Society for such personal use.
2. Chairman Long presented a resolution of appreciation for the work of Mrs. Louis K. Hundley. The resolution and its presentation at the luncheon following the Council meeting was approved.
3. Dr. Saltzman discussed inviting representatives of the Hospital Association to future Council meetings. The Council voted to accept the suggestion for information and to continue to follow Council policy of inviting representatives of other organizations when business to come before the Council seemed to recommend the presence of the association's representative.
4. Upon the motion of Shuffield and Clark, the Council directed Arkansas Medical Society delegates to oppose the AMA dues increase at the coming interim meeting in Portland.

5. Voted not to approve a motion for the Arkansas delegates to vote for the reinstatement of the AMA Council on Mental Health. It was recognized that the Council on Mental Health had done good work but it was the consensus that the Society could not logically vote against providing more money (dues) for programs and, at the same time, vote to retain all of past programs.

The Council adjourned at 12:00 noon.

APPROVED: C. C. Long, M.D.
Chairman

MINUTES HOUSE OF DELEGATES, ARKANSAS MEDICAL SOCIETY

The House of Delegates of the Arkansas Medical Society was called to order at 1:45 p.m. on Sunday, November 24, 1974, in the Downtown Holiday Inn, Little Rock. Speaker Amail Chudy presided. Speaker Chudy called on W. Payton Kolb for the invocation.

Delegates, councilors, officers, past presidents and members seated as delegates were present as follows:

Arkansas, R. H. Whitehead; Ashley, Donald L. Toon; Baxter, John Guenther; Benton, James D. Huskins; Boone, Mahlon O. Maris; Clark, Jerry Mann; Cleburne, W. M. Wells; Columbia, Charles L. Weber; Craighead-Poinsett, James W. Sanders, James Robinette; Crawford, Millard C. Edds; Crittenden, Milton Deneke; Dallas, Don Howard; Desha, Howard R. Harris; Faulkner, Jimmie J. Magie; Garland, Robert Hill; Grant, Curtis Clark; Greene-Clay, Asa Crow, A. J. Baker; Independence, Jim E. Lytle; Jackson, John D. Ashley; Jefferson, T. E. Townsend, R. T. Brooks, George Roberson; Johnson, Boyce West; Miller, Donald Duncan; Mississippi, F. E. Utley; Monroe, N. C. David; Pulaski, Edgar Easley, Raymond Biondo, James L. Smith, Curry Bradburn, James Weber, William Jones, Paul Cornell, Frank Westerfield, Ashley Ross, Winston Shorey, Fred Kittler, Ellery Gay, Ray Jouett, J. Mayne Parker, George Mitchell, Harold Hutson; Saline, Helen Rountree; Sebastian, Carl Williams, Kenneth Lilly, Kemal Kutait, Annette Landrum, Joe Dorzab, Don Chambers; St. Francis, G. A. Sexton; Union, C. E. Tommey, Berry L. Moore; Van

Buren, John A. Hall; Washington, Wade Burnside, Friedman Sisco; Student, Intern and Resident, L. L. Doss; Councilors, Eldon Fairley, Paul Gray, L. J. P. Bell, Raymond Irwin, J. B. Jameson, W. Payton Kolb, Henry V. Kirby, C. C. Long, John B. Kirkley, John Bell, John P. Burge, John H. Moore, C. Lynn Harris, Curtis Clark, William S. Orr, Morris Henry; President, Ben N. Saltzman; President-elect, T. E. Townsend; First Vice President, G. Thomas Jansen; Speaker, Amail Chudy; Vice Speaker, Charles F. Wilkins; Secretary, Elvin Shuffield; Treasurer, Kenneth R. Duzan; Past Presidents, Ross Fowler, Joe Verser, Stanley Applegate, Robert Watson, John P. Wood.

Fred Heinemann was present as president of the Arkansas Chapter of the Student AMA. Gary Barger, Bill Dudding, and Bill Hudson were present as representatives of the Junior Class at the University of Arkansas School of Medicine.

The House transacted business as follows:

- I. Speaker Chudy called on the Chairman of the Legislative Committee, Elvin Shuffield, for a report from his committee and suggested a standing ovation for the work he does for the Society.

Dr. Shuffield presented the following report:

1. Dr. Shuffield advised the members that they would be receiving letters from the headquarters office asking for volunteers for the medical consultation room at the Legislature and asking for names of members of the Legislature personally known to them. He urged members to respond to these requests from the Society office.
2. Dr. Shuffield asked Mr. Warren to discuss proposed legislation governing abortions performed in Arkansas.

Mr. Warren recommended that the legislative proposal should provide that only physicians currently licensed to practice in the State should be permitted to perform abortions, it should make illegal the advertising of abortion services or facilities for the performance of abortions or the availability of diagnosis to determine if an abortion is indicated, it should concur with the Supreme Court decision that abortion in the first trimester of preg-

nancy is a medical matter between the woman and her physician, that the State can enact reasonable regulations governing the manner in which abortions may be performed during the second trimester of pregnancy after the period of viability, and that the State may prohibit any abortions during the third trimester. Mr. Warren recommended that the proposal should also cover that period in the second trimester before the period of viability and he suggested that the Arkansas State Medical Board be authorized to promulgate regulations governing performance of abortions subject to guidelines set by the Legislature. The House voted approval of the legislative proposal as presented.

3. Dr. Shuffield then asked Mr. Warren to explain a proposal he had drafted for an act to establish with the State Department of Insurance a Professional Malpractice Insurance Commission. The Commission would be composed of three members to be appointed by the Governor to serve at staggered terms. Members of the Commission would select and maintain for each judicial circuit in the State of Arkansas a panel of twelve laymen, twelve physicians, and dentists if they wish to be included, from which a three-man arbitration board would be selected. The arbitration board (composed of a layman, a physician and a judicial referee) would hold informal hearings—provided both parties were agreeable—when a malpractice claim was filed with the Commission. If both parties agree, the board determination on the case is final. Neither claimant nor physician would be required to have a lawyer. The proposal is designed to do away with a great deal of the expense that arises because of suits in medical malpractice. The House approved the proposed legislation as presented.
4. Dr. Shuffield discussed a request from the Pediatrics Section that the Society sponsor legislation to require insurance companies to cover newborn and infant care under medical and hospital insurance. The House voted to approve the recommendation of the Legislative Committee that we

work with the Insurance Commissioner to try to get such coverage through administrative rather than legislative methods. If it cannot be done administratively, then the Society would propose legislation.

5. Dr. Shuffield then discussed a request from physicians in the Blytheville area that the Society try to get sterilization procedures covered under insurance policies. The House approved the recommendation of the Legislative Committee that this also be handled through administrative action of the Insurance Commissioner, if possible, with legislative action taken if necessary.
6. Dr. Shuffield advised the House that the ophthalmologists wish Society support in getting the so-called "Duffy Amendment" to the Medical Practices Act repealed. Dr. Shuffield moved that the Society support repeal of the amendment and, upon second by James Smith, the House so voted.
7. Dr. Shuffield presented a request from the ophthalmologists that the Society work for repeal or amendment of Act 10 of 1973, the Act that prohibits a State employee, State Board or Commission member or employee from referring eye cases to the proper type of eye doctor. The Act has proven to be a great handicap to school teachers in case of injury on the school grounds. The House approved working for repeal of the Act.
8. Dr. Shuffield then presented a proposal, also from the ophthalmologists, to control the use of any form of drugs for diagnostic or treatment purposes. Upon motion of Henry, second by Kolb, the House voted to oppose allowing groups that are not under the Medical Practices Act, Veterinary Act, or Dental Act, to prescribe medication or use drugs for diagnosis or treatment of diseases.
9. Dr. Shuffield presented a recommendation from his committee that legislation be drafted to require all writers of malpractice insurance to notify the respective board of any malpractice suit filed. Mr. Warren assured the House that the legisla-

tive proposal would provide that such information would be privileged. The House voted to approve the proposed legislation.

10. Dr. Shuffield reported that the Insurance Commissioner has drafted a bill to implement Federal law on Health Maintenance Organizations (HMO's). The House voted that this be received for information.
11. Dr. Shuffield reported that the Legislative Committee wishes to have laws of the State researched to determine whether present statutes protect physicians serving on state-wide or areawide professional standards review and similar review committees against libel and damage suits, so that action may be taken if the research indicates a need for more protective legislation. The House voted its approval.
12. Dr. Shuffield then discussed legislation proposed by the Emergency Medical Technicians. The Legislative Committee recommended that the technicians be encouraged in furthering their education, in certification, and in providing good ambulance service. Dr. Shuffield moved approval of the Committee recommendation and the House so voted.
13. The Legislative Committee voted to recommend drafting of legislation requiring some form of continuing educa-

tion leading to recertification. The House voted approval of drafting of such legislation with the understanding that the proposal would be brought back to the House of Delegates for consideration prior to introduction in the Legislature.

14. Dr. Shuffield then asked the Dean of the Medical School, Thomas A. Bruce, to present to the House the School's budget proposal for the next biennium. Upon motion of Shuffield and Shorey, the House voted to go on record as supporting the Medical School's budget request.
15. Dr. Shuffield reported that his Committee made no recommendation regarding physicians' assistants. Upon motion by Verser, the House voted to take no action on this subject.
16. Dr. Shuffield reported on attempts to modify and update laws governing drug abuse and his comments were received for information.
17. The House voted to support the recommendation of the Legislative Committee that the healing arts examination should be continued as legislation now provides.

The meeting of the House of Delegates adjourned at 3:45 p.m.

APPROVED: Amail Chudy, M.D.

Speaker, House of Delegates



February, 1975

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 71 No. 9

FORT SMITH, ARKANSAS

ARKANSAS MEDICAL SOCIETY
CENTENNIAL YEAR
ANNUAL SESSION
APRIL 20-23, 1975
ARLINGTON HOTEL, HOT SPRINGS

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● Predominant psychoneurotic anxiety

● Associated depressive symptoms

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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor

neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive dis-

orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

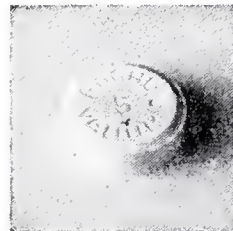
respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent

in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium[®]
(diazepam)
2-mg, 5-mg, 10-mg tablet

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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Arkansas

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 71, No. 9. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

What Price Love?

Etta Holitik Thurmond, R.N., MPH

Recently a leading practicing physician spoke of "Love" at a rap session for doctors and nurses of Arkansas and I thought it might be time for us to take a look at that positive behavioral concept.

First, let us take a brief glimpse into the field of mental health, so we might develop a concept of love as an important and a most crucial part in the makeup of our strength of personality upon which depends our ability to maintain *positive* mental health. Looking at our society we see that all people do not get mentally ill when faced with a situation involving much stress. Looking further into this matter we find that *environmental* stress and the *strength of personality* are directly related; the greater the stress the greater the strength in our personality must be in order to keep us from becoming sick. Here I would like to clarify personality as meaning, "all that a person is, feels, and does, consciously and unconsciously, as manifested in interaction with his environment."¹ We know that the environmental stress is ever with us, from the time that we enter this world struggling to get our first breath until the time when, no longer concerned with the struggle, we take our

last breath. Therefore, our ability to "master" our environment would bring positive mental health. Mastery of our environment depends on our relations with people. Our ability to form these relationships, to work and relate to another, so that we feel secure and satisfied depends on our strength of personality; the extent to which we are able to gain this feeling depends on our present concept of love and how much it has progressed as we, the individuals, have developed physiologically.

Now we are ready to look at the concept of love in relation to the individual's developmental processes. We can begin intra-utero, for here the human organism spends nine months in developing, and trying to satisfy his needs. How well his needs are satisfied, just exactly what they are, how much influence this stage has on later behavior, and what are the best things for a pregnant mother to do in order to grow a healthy infant are still areas of much controversy.

Birth must bring a shock to this infant for now he is faced with environment where he must have certain needs met and yet he is only a helpless infant. He has much adjusting to do in order to cope with this situation so that he might exist and develop. His journey through Freud's "phases" of life has begun.² His mouth is now the main way to relate to this big outside world and so the first weeks of life are spent in an "oral" phase. Crying is his way of making known and insisting that he demands some satisfaction. During this time the infant requires unconditional love and attention governed by his needs and demands. The degree to which his mother or mother-substitute is able to understand, to give warm and positive feelings, and to meet the baby's first needs, may be the measure of his later ability to struggle, to adapt himself to circumstances, to feel secure, and master this

BIOGRAPHICAL STATEMENT

Mrs. Etta Holitik Thurmond is an Assistant Professor at the University of Arkansas Medical Center, School of Nursing, Little Rock, Arkansas. She graduated from nurse's training at Sparks Memorial Hospital in Fort Smith, Arkansas, in 1946; received her B.S. Degree from the University of Hawaii in Honolulu in 1957; and her M.P.H. from the University of North Carolina School of Public Health at Chapel Hill in 1971. During the last 25 years, she has enjoyed varied nursing positions, from general duty to teaching and from hospital to public health. (As the wife of a regular army officer, she moved frequently; the last tour being Anchorage, Alaska, where she was a School Nurse.)

She is the mother of three children, all away from "home" at different schools.

changing world eventually in his own terms. Mother is usually the first person in the world that the infant associates with, therefore she represents the first personal, first social, first sensuous, and first love relationship. We can assume then that this relationship sets the pattern for all subsequent relationships. If bonding³ takes place and this relationship is based on a mother's mature love then the baby starts life with a health foundation upon which to develop. Baby must be loved just as he is, and his need for security must be satisfied so that he does not undergo long periods of fear and become anxious. His need for sensuousness must be fulfilled by physical contact, by breast feeding—giving the nipple to mouth contact; or by holding, fondling, petting, and close contact when being bottle fed. This feeding process should be a love relationship, mother enjoying it and baby knowing that mother enjoys it and him. Research studies have discovered that even though an infant is provided with all the chemical substances necessary at regular intervals and in the correct quantity, he may not thrive. He may get along to some degree physically but as a personality he will suffer.⁴

Next comes the "anal" phase and if the child feels secure in a mother's love then he will be able to give up the pleasure of soiling himself and comply with toilet training in order to please the mother. During this stage the child begins to realize that demands are placed on him, too, and tries hard to please the person that he loves. If he feels secure then the rewards of growing up are much bigger and better than the things he is deprived of.

Then comes the "oedipal" phase where the child begins to recognize the different sex roles. This is a period of exploration and development of initiative and creative ability. Here also he imitates the person who is his own sex and may form a strong attachment to either father or mother, whichever is the opposite sex.

And now the "latent" phase moves in and the child begins to find his place in society and among his peers. His interests move beyond the home, and center around learning and accomplishment.

The "adolescent" phase of personality development brings on a state of confusion and mixed feelings. The four "tasks of adolescence" are ahead.⁵ The sex glands are maturing, the child

is maturing socially, and he is now confronted with the desire to be independent and free of his parents yet not altogether able to function without them.

Here at this point a combination and integration of *all* his past experiences will determine his behavior. If his relationships with both mother and father, and significant others, have been healthy ones so that his love has developed along with his personality phases, then he will eventually be able to enjoy a mature adult love. If his relationships have not been healthy, then personality disorders arise and perversions or abnormalities show up. Let us look back a bit at the term "mature love," Peplau tells us, "only to the extent that one appreciates oneself can the capacity to love others be felt and expressed;"⁶ thus we understand that mature adult love is one in which a person has the ability to care for and accept others as much as he cares for and accepts himself; and that his satisfaction and security as well as another's satisfaction and security are equally important. If the individual's key relationship at significant times has been a healthy one, then he has learned to accept himself; he knows that he is worthwhile in this complex environment; he has developed self-confidence and the ability to criticize and examine his own beliefs, principles, and values. He feels secure and is satisfied; therefore, he can give love and receive love in a like manner. Thus, a person is able to master his environment when he has become capable of mature adult love because he no longer feels threatened by the complexities of life.

But how does all this apply to medicine and nursing? We know that the nurse is a "mainstay" in the "Helping Professions;" she has been around a long time and has proven herself well. She has opportunity to move freely within the community and the hospitals, to work with people from many disciplines and many departments, to work with "well" people and with "sick" people; if she is mature then she will be able to stimulate and foster a favorable environment for her patients and for those she comes in contact with. If the nurse has a mature adult love then she can use this "love" or feeling of positiveness as a therapeutic tool to work through in helping her patients and the community move toward health and maturity; but before she is able to help anyone, she must be

able to understand and know herself. The more mature the nurse, the better relationship formed between herself and others. Only if the nurse accepts herself as an individual is she able to accept her co-workers and patients as individuals, realizing that each has a potential and strokes help to develop this capacity; and only to the extent that each person is able to develop and grow in his feeling of "love" is he better able to cope with, if not master, his environment.

The patients cannot be helped to view their behavior objectively unless the nurse and doctor can do so. Both must accept the behavior and expression of needs in a calm, non-judgmental way. Each must give praise when it is called for, give reassurance when needed, show interest in patients as individuals, help them to feel important and accepted, and help them to gain faith in themselves once more. This is a big and varied role for anyone to play. Can we remember that perhaps the best way to fill this role is really by listening to what the other person is saying and then responding to the best of our ability in whichever way that we feel will mobilize the patient's or the "community's" tendency toward health? Do we understand the interaction and our own perception of others? Do we feel comfortable with our present knowl-

edge and today's outlook? If not, what can we do? Have we continued to grow within our own profession? Are we satisfied with today's performance and looking forward to tomorrow?

Fromm tells us that, "Love is an active power in man; a power which breaks through the walls which separate man from his fellow men, which unites him with others; love makes him overcome the sense of isolation and separateness; yet it permits him to himself, to retain his integrity."⁷

Are we, the prime providers of Health Care, ready to unite to meet the challenge?

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Phacoemulsification: An Improved Cataract Technique

F. Hampton Roy, M.D.*

In 1967, Kelman¹ described the technique for cataract removal through a small incision with a hollow needle vibrating at a frequency of 43,000 cycles per second. This method incorporates a system for irrigation and aspiration of the fragmented lens material. Use of this system calls for skill and experience in microsurgery after attendance of a training course to acquaint the surgeon with the techniques.²

Phacoemulsification is a very difficult surgical procedure with a very small margin of error. Some of the 500 surgeons who have initially taken an instruction course have not decided to do phacoemulsification. A very sophisticated piece of equipment and the operating microscope are vital for doing this procedure. The instrument primarily in use is made by Cavitron Surgical Systems. Initially the instrument cost \$40,000, but currently runs \$24,000.

The advantages of doing this procedure is that a small (3 mm) incision is made into the eye. Individuals can go back to full activity including tennis or playing golf on the day

after surgery. This is most applicable for people with a very active life such as executives or individuals who are unable to lie in bed for long periods of time. This technique is used on children who do not need to be limited or tied down and on older people who need to get back into familiar surroundings. This procedure is applicable for individuals who are high risk for retinal detachments and is currently being shown that it is a safer operation in relation to the retina.³ This is probably because leaving the posterior capsule and the zonules adds more stability to the eye.

The period of hospitalization for this type of cataract surgery is much shorter with the individual coming in the day prior to surgery and being discharged the day of surgery or the day after surgery. Outpatient cataract surgery is currently being done with this procedure.⁴

PROCEDURE

The surgical technique involves:

1. A small limbal incision of 3 mm. This incision only takes one suture to close after the

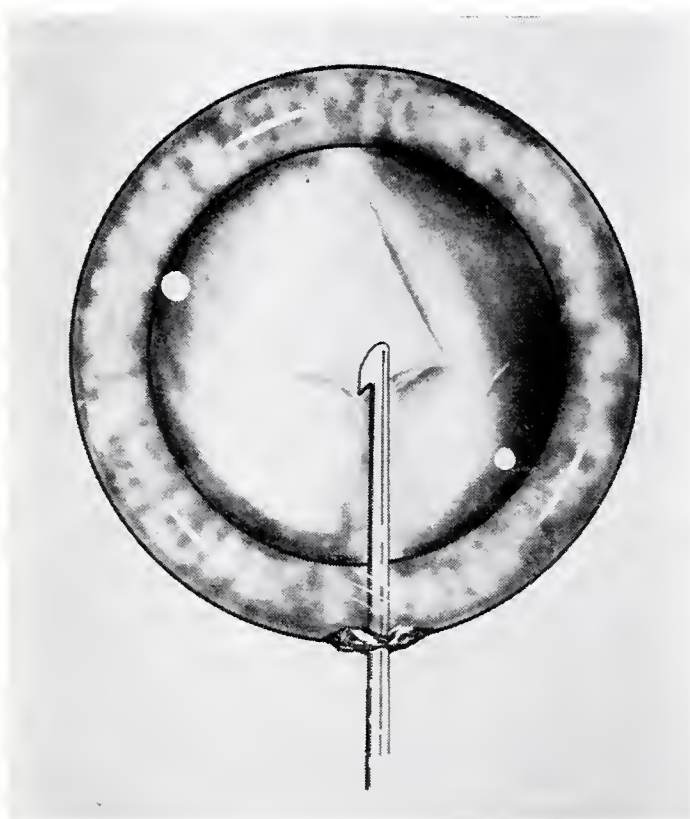


Figure 1.

Cystotome opening in the anterior capsule. Note that a conjunctival and corneal-scleral opening of 3 mm is made at 12 o'clock.

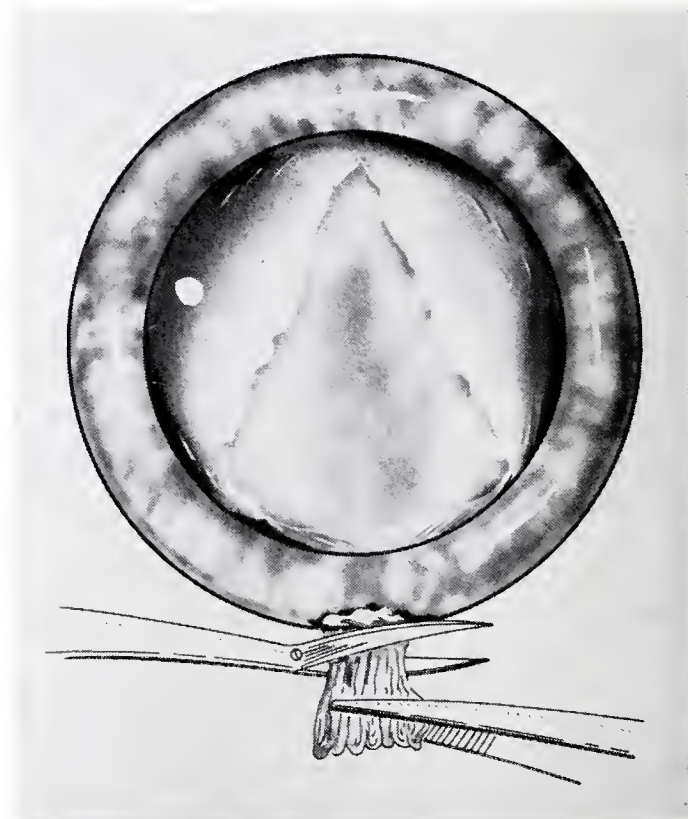


Figure 2.

The anterior capsule is drawn out of the eye and cut off.

*390 Medical Towers Building, Little Rock, Arkansas 72205.

procedure. This is in contrast to a conventional type of cataract procedure in which the eye is opened about 19 mm.

2. A large opening is made in the anterior capsule (Fig. 1). It is important to make a large opening in the anterior capsule of the lens so that the nucleus can be prolapsed into the anterior chamber.

3. Delivery of the nucleus into the anterior chamber with the cystotome (Figs. 4, 5). Bringing the nucleus of the lens into the anterior chamber helps prevent damage to the vitreous and to the posterior capsule. The lens nucleus is brought close to the cornea and great care must be taken so that the cornea is not damaged.

4. Ultrasonic fragmentation and aspiration of all lens material (Figs. 6, 7 and 8). A hollow titanium needle vibrates 43,000 times per second in and out $3/1000$ ths of an inch to chop, dissolve, and suck out the diseased lens. It is very much like a pneumatic drill breaking up concrete. The amount of ultrasonic time to break up the lens is 2 to 3 minutes in young or middle aged patients and up to 6 minutes in older patients with harder cataracts. The amount of ultrasonic vibration is approximately $1/100$ th of the minimum tolerated dose of the eye. This is well within acceptable limits.

5. The posterior capsule is opened in individuals younger than 55 years of age or those who have an opacity of a posterior capsule (Fig. 9). It is important to do a posterior capsulotomy

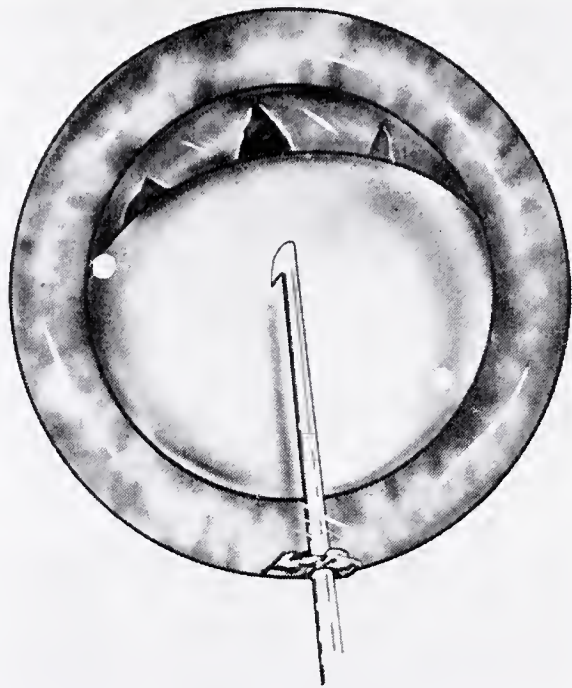


Figure 4.
The lower pole of the lens is prolapsed out of the capsule.

leaving the vitreous face intact. This decreases the possibility of retinal damage.

6. One suture is used to close up the corneal scleral wound.

7. The patient may leave the hospital the day after surgery and resume normal activities.

8. A correcting lens either glasses or contact lens is usually fitted in two to four weeks following surgery.

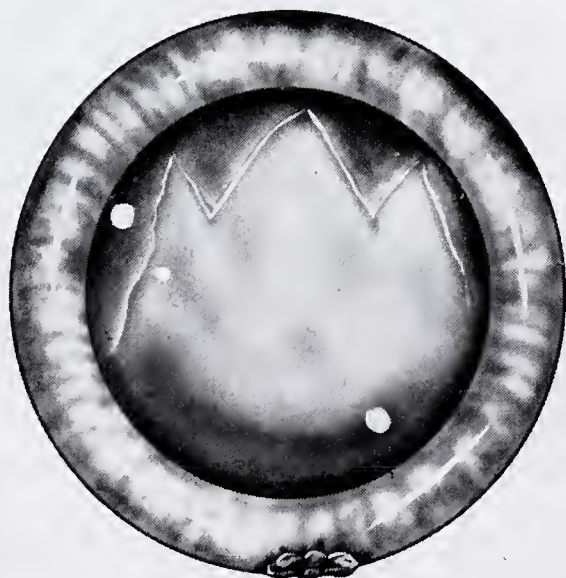


Figure 3.
The anterior capsule opening is further enlarged with the cystotome.



Figure 5.
The upper pole of the lens is prolapsed out of the lens capsule and the lens mass is brought into the anterior chamber. The posterior capsule and zonules are intact.

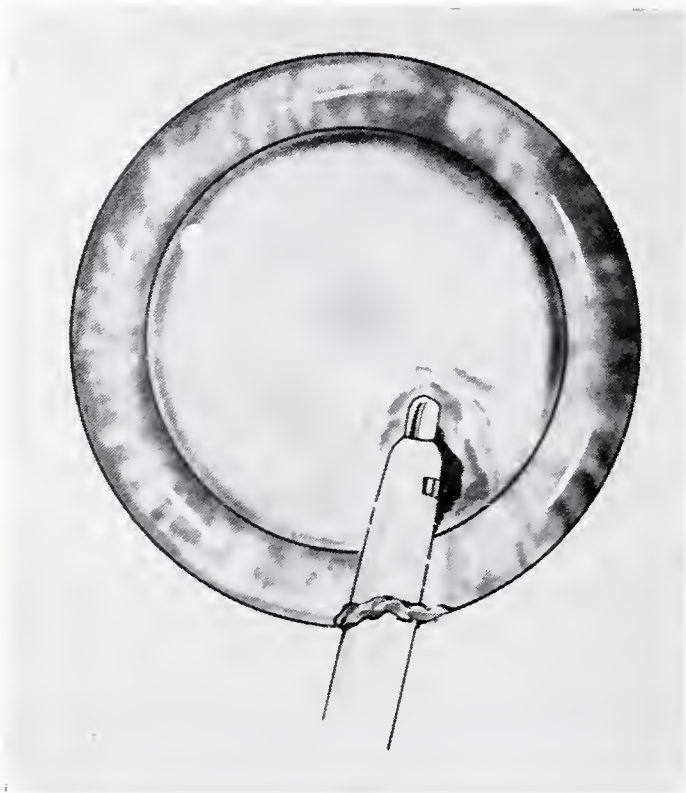


Figure 6.
Beginning emulsification, irrigation, and aspiration.

SUMMARY

Cataract removal by phacoemulsification is technically a more difficult procedure than the conventional cataract procedure. It requires the use of the operating microscope and a sophisticated piece of equipment. The advantages include a small incision, rapid return to full activity, an excellent surgical procedure for

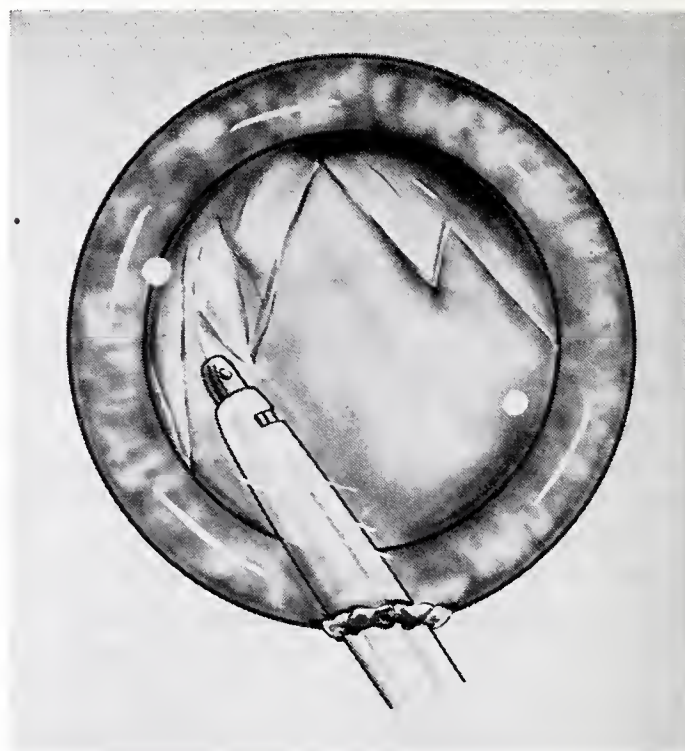


Figure 8.
Aspiration of cortical remnants from the equatorial area of the lens capsule.

children, middle-aged individuals, and elderly, and a lower incidence of ocular complications than with the standard cataract procedure. Complications which have occurred with this procedure include corneal complications, vitreous loss, retinal detachment, and glaucoma.⁷ These complications are fewer than in the standard cataract procedure.⁸ It appears that

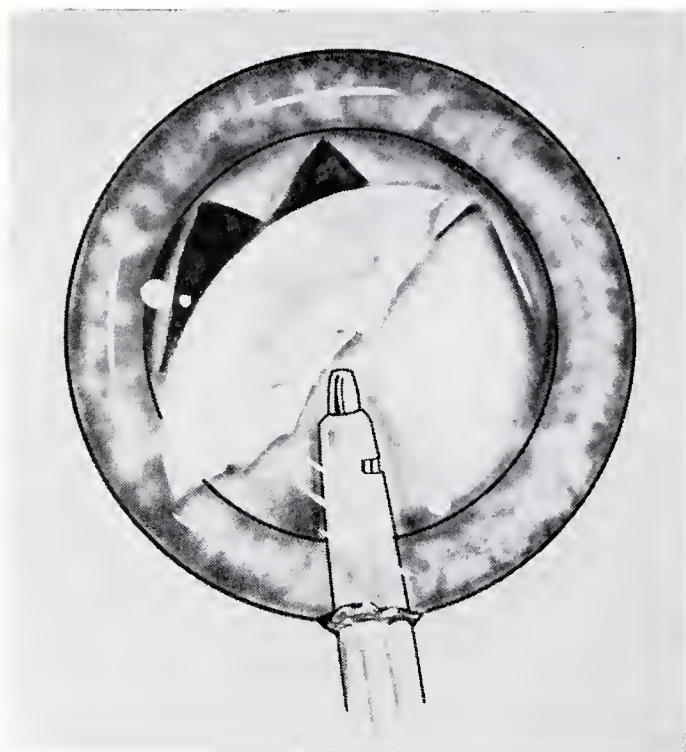


Figure 7.
End of emulsification, irrigation and aspiration with very little lens material remaining in the eye.



Figure 9.
Posterior capsulotomy, the capsule is torn to give a clear pupillary opening.

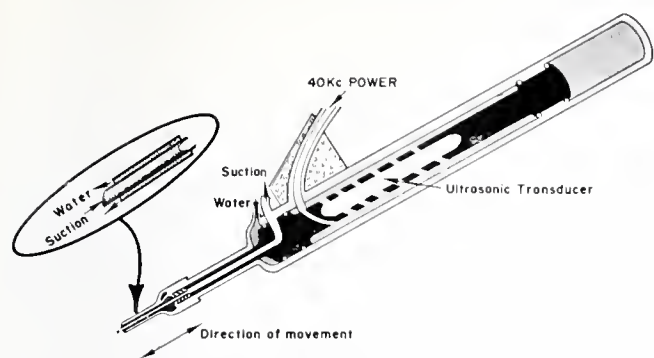


Figure 10.

Phacoemulsifier in cross section. Note that there is high frequency ultrasonic vibrations of the needle, aspiration through the hollow needle point and irrigation into the eye from a sleeve around the needle point.

this new improved cataract procedure adds another dimension to cataract surgery.

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TABLE 1
ADVANTAGES OF PHACOEMULSIFICATION⁵

1. Small incision
2. Short hospitalization
3. Return to full activities
4. Decreased danger of retinal detachment

TABLE 2
RELATIVE CONTRAINDICATIONS TO
USING PHACOEMULSIFICATION⁶

1. Corneal endothelial dystrophy
2. Poor dilation of the pupil
3. Brunescant nucleus
4. Subluxated or dislocated lens in a patient over the age of 35 years
5. Shallow anterior chamber



Overpopulation and Extra-Adrenal Effects of ACTH

James N. Pasley, Ph.D.*

As the population of the world increases at compound interest every year we need to know what happens to animals, including man, when their territories become overpopulated. In 1950 it was proposed that population growth and decline among mammals were regulated by a series of feed-back mechanisms, involving the pituitary-adrenocortical and pituitary-gonadal systems and that these in turn were activated by socio-psychological factors (increased social interaction) within the population.¹ The thesis was that pituitary-adrenocortical function would increase and pituitary-gonadal function would decrease as population density increased. The former would lead to increased mortality and the latter to decreased natality. This density-dependent system, therefore, limits population growth and prevents the over-utilization and destruction of environmental resources and thereby the species own extinction.

Present evidence indicates that interacting behavioral and endocrine mechanisms comprise an important part of such a system in the individuals in a population. The system responds to changes in the number of animals in such a way that population growth is self-limiting and self-regulating. Experiments involving the effects of grouping mice generally have supported this hypothesis and these responses also have been related to social rank with the effects of descending rank paralleling those of increasing density.^{2,3,4,5} In addition reserpine and chlorpromazine treatment diminish the responses to increased population density by decreasing aggressive interaction.²

Results of studies on freely-growing confined populations of mice, voles and rabbits and on natural populations of rats, deer, woodchucks and voles have paralleled those from the more artificial laboratory populations.² Since increased social interaction (group size) increases adrenocortical secretion, increased susceptibility to and mortality from infection, parasitism, and a variety of specific pharmacological and physical agents would be anticipated. This has been demonstrated repeatedly in mice, rabbits and other species.²

All phases of reproductive function are curtailed by increased density in a variety of species in the laboratory as well as in the field. Inhibition of maturation appears to be the most important single aspect of these responses.

Since increased density is accompanied by increased secretion of ACTH by the anterior pituitary, it was decided to examine whether exogenous ACTH administration would inhibit reproductive maturation in mice. ACTH treatment resulted in inhibition of reproductive development and function in intact, immature and mature female house mice.² The ovarian effects included follicular atresia and absence of luteinization. Uteri and vaginae remained small and essentially infantile. Results of subcutaneous injections of 1/2, 1, 2, or 4 units of ACTH in gelatin for 10 days were dose dependent as shown by a linear decrease in uterine weight as logarithms of doses of ACTH increased.² The doses of ACTH used were not unrealistic in mice since 4 units a day produced the same degree of adrenal hypertrophy as produced by high densities in freely growing, confined populations of mice.² ACTH has similar effects in adrenalectomized corticoid-maintained females except that uterine development is not as greatly retarded. The adrenal glands, therefore, are not essential for this inhibitory action of ACTH although they have an augmentative role. The somewhat greater effect of ACTH in intact than in adrenalectomized mice suggests that this augmentation may be due to increased adrenal androgen secretion since injection of corticoids in a wide range of doses had no such effect.² ACTH may inhibit hormone maturation of intact mice for at least three months.² After three months ovaries of intact females treated with ACTH exhibit a great decrease in the number of follicles and corpora lutea accompanied by obvious interstitial hyperplasia.

In contrast to the effects of ACTH on female house mice, ACTH does not induce major depression of testicular weight and spermatogenesis is unaffected in male house mice. ACTH, however, does produce a significant depression of seminal vesicle weight⁶ indicating decreased testicular androgen secretion.

*Associate Professor, Department of Physiology and Biophysics, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

ACTH has similar effects on reproductive function in intact female white-footed mice and meadow voles. In contrast, however, to its effects on male house mice, four units of ACTH profoundly inhibits sexual maturation, spermatogenesis and reproductive function in male white-footed mice and voles both mature and immature.^{4,7} The testicular regression is characterized by the more advanced germinal elements being affected first.⁴ ACTH also induced reproductive inhibition in adrenalectomized corticoid-maintained white-footed mice of both sexes. Reproductive function in both sexes of white-footed mice and meadow voles is inhibited by caging in groups as by ACTH.^{4,5}

Thus, the action of ACTH on reproductive function in mice appears to be largely non-adrenal mediated. The absence of corpora lutea in female mice suggests that gonadotrophin secretion is inhibited by ACTH. The deleterious ovarian effects apparently are not produced by direct action of ACTH on the ovary as injection of crude pituitary homogenates can overcome this action.²

We have recently examined whether the effects of exogenous treatment with ACTH are indeed similar to those produced when the animal's own ACTH is stimulated. Endogenous ACTH secretion was stimulated by Metyrapone which inhibits formation of major corticosteroids by blocking 11β -hydroxylation and induces a compensatory increase in ACTH production.⁸ After chronic treatment with metyrapone for three and four weeks, normal reproductive maturation and fertility is disrupted through inhibition of corpora lutea development in female mice and voles and seminal vesicle development in male mice and voles.^{4,10} The results with metyrapone, therefore, lend further support to the hypothesis that increased pituitary-adrenocortical activity may impair reproductive function in mammals.

In addition to the important effects of physiologic inhibition of reproduction, especially inhibition of maturation in the regulation of population growth among mammals, it should be noted that mortality also is related to density. Increased adrenocortical activity due to increased density and social strife will result in increased susceptibility to most kinds of infectious disease due to suppression of normal defense mechanisms.² For example, renal glomerular disease with clinical and histological characteristics

resembling those of chronic nephrotic glomerulonephritis probably were the major cause of mortality in populations of woodchucks² and Sika deer.¹¹

Attempts to induce this disease with ACTH, either natural porcine or synthetic β -¹⁻²⁴ produced a similar, if not identical, disease in mice and woodchucks.² The severity of the disease is dose and time dependent. With light microscopy the glomerular lesions are characterized by deposits of intensely PAS-positive material in the mesangium, glomerular stalk and juxta-glomerular region. The glomerular lesions were shown by EM to consist of deposits of a very electron dense homogenous material in the mesangial region and sometimes within the axial portions of basement membranes of the capillary loops.¹² The disease is also produced by ACTH in adrenalectomized mice but is less severe than in intact mice.²

How ACTH produces glomerular disease in mice and woodchucks is unknown. Whether or not the naturally occurring renal disease of woodchucks is produced by increased secretion of ACTH is not known but the results of experiments described above and the relationship between social competition and severity of the naturally occurring disease suggest that ACTH may be an etiologic factor. Although the presence of adrenals increases renal lesion severity, glucocorticoids² and aldosterone⁶ do not appear responsible for this enhancement. Furthermore, although glomerular lesions are easily produced in house mice by natural or synthetic ACTH,² no lesions resulted after similar doses of ACTH in voles⁷ or white-footed mice.⁴ These species differences indicate the possibility that the renal pathology of ACTH-treated house mice can be attributed to a hyperimmune response to exogenous ACTH. Recent data, however, suggest that the glomerulonephritis produced by ACTH may not involve immunological processes since treatment with cyclophosphamide, a potent immunosuppressive agent, failed to prevent renal lesions in ACTH treated mice.¹³

From the preceding account, it should be evident that density-dependent endocrine mechanisms have important consequences in population affairs. Moreover, it seems clear that there are considerable differences between species in the degree of inhibition of reproduction and glomerular disease produced by ACTH. Also,

one can conclude that increased population density, with its consequent increase in ACTH production, apparently evokes a series of negative feed-backs that effectively inhibit reproduction and diminish fertility in proportion to the increase in density. In addition to the more obvious endocrine negative feed-back mechanisms there also may be short feed-back loops within the central nervous system that inhibit gonadotrophin secretion. The central nervous system is involved since it is the integrator between social behavior ("social pressure") and the endocrine systems. Since the results of grouping and of ACTH are remarkably similar in intact and adrenalectomized mice, perhaps ACTH and grouping directly affect the same CNS centers to curtail reproduction and induce renal changes. Currently, we are exploring what supra-hypothalamic areas may be involved.

In conclusion, we believe the relationship of population density and the extra-adrenal actions of ACTH on mammalian reproductive function and renal disease may have important bearings on human ACTH therapy and may provide a partial explanation for the pathogenesis of certain types of sterility and disease in humans. A recent study¹⁴ which reported decreased fertility and reproduction in humans with duodenal ulcer appears to strengthen these feelings.

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Office Orthopaedics

Arthrography of the Knee

Philip H. Johnson, M.D.*

Clinicians have for years described in intricate detail the symptoms and physical findings of internal derangement of the knee, each adding his "pearls" to this complex schematic. In the final analysis the clinical diagnosis of a torn meniscus often leaves something to be desired. Nicholas reports 80% accuracy on clinical basis alone.¹¹ In general clinical accuracy will range from 50-80%.^{8,15} Arthrography can increase preoperative diagnosis to as high as 95.5%^{11,15} and can add for the orthopedist the same dimension that the chest x-ray provides the thoracic surgeon—actual roentgenographic visualization of the lesion.

For the past three years we have performed double-contrast arthrography with television fluoroscopic and spot films^{10,4,1} primarily for the diagnosis of occult meniscus lesions. We feel that double-contrast (injection of air and dye) gives all the advantages of the positive contrast technique (injection of dye only) plus the added advantage of air contrast in the prone position. Both of these techniques are therefore utilized and each confirms the findings of the other.

TECHNIQUE

The knee to be examined is thoroughly prepped and draped as for any joint injection or aspiration. Xylocaine 1% is used to produce surface anesthesia and an 18 gauge needle is introduced into the joint. All fluid is removed from the joint and 5 cc. of Renograffin-60 and

30 cc. of air is injected into the joint. The needle is removed and the patient is encouraged to exercise the leg, standing and walking a short distance to distribute the contrast media. The suprapatellar pouch is then compressed with a 3 inch elastic wrap forcing the dye and air downward into the joint proper. Fluoroscopy of the joint is then carried out with the knee secured in a plastic adjustable thigh restraint** (Fig. 1) in order to apply varus and valgus strain to open the desired side of the knee. Tangential spot films are made at four to six sites about the joint line perpendicular to the tibial plateau with strain applied. Additional spot films are made in questionable areas as fluoroscopy progresses. The first series of films is made of the medial and lateral meniscus with the patient supine allowing the dye to surround the dependent meniscus (giving a "positive-contrast" effect). A second series of films is made with

**The original model was secured by Dr. John Joyce and recently modified by Dr. Doyne Dodd to provide adjustment for differing thigh circumference.

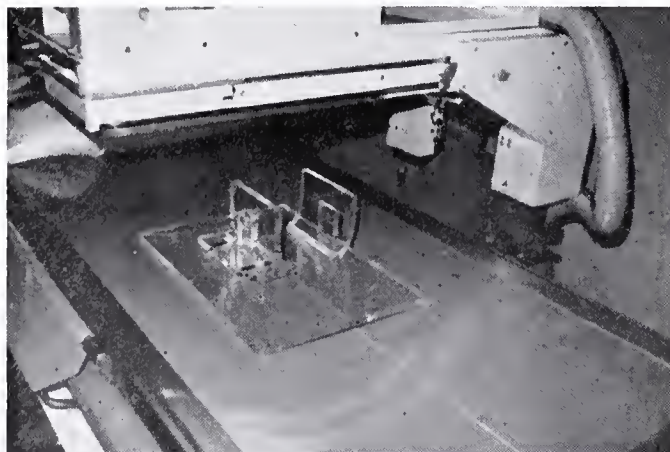


FIG. 1

*Little Rock Orthopedic Clinic, P.A., Little Rock, Arkansas 72205. Acknowledgement: I am deeply indebted to Radiology Consultants at the Baptist Medical Center, Little Rock, Arkansas, for this joint effort. They have provided encouragement, cooperation, and professional expertise.

the patient prone, allowing the dye to fall away from the meniscus being examined, giving a true

double-contrast effect with air surrounding a dye coated meniscus. Each of these studies may

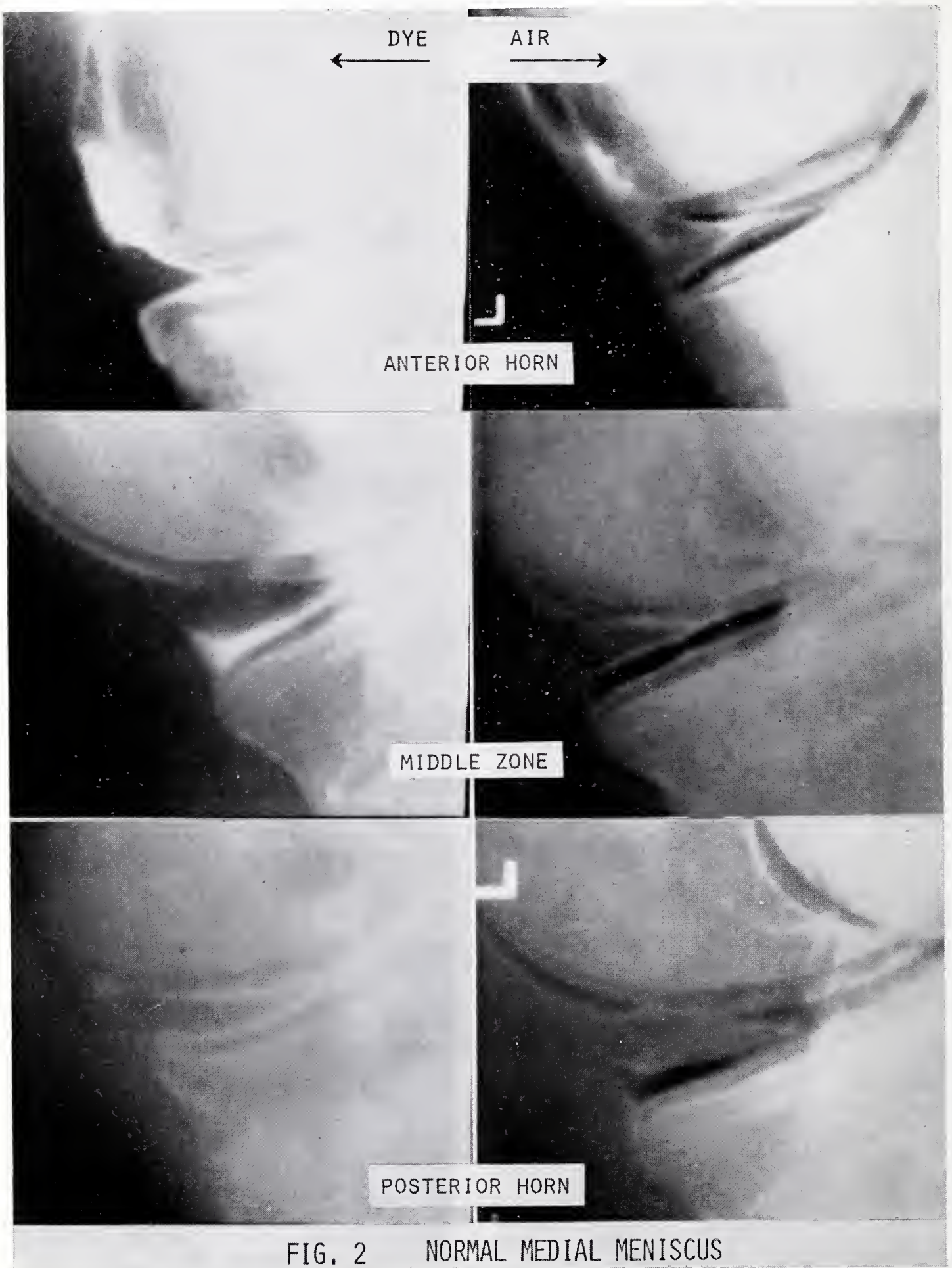


FIG. 2 NORMAL MEDIAL MENISCUS

be diagnostic and together they usually give conclusive evidence of injury or disease.

INTERPRETATION

The normal medial meniscus (Fig. 2) is attached to the medial tibial condyle about its entire periphery by the coronary ligament and its synovial reflections. The meniscus progresses in size, anterior to posterior, and should appear as a sharp, distinct, triangular shaped structure. The normal lateral meniscus (Fig. 3) is more uniform in size and is also attached to its tibial condyle, with one exception. The popliteus tendon and its sheath are superimposed on the posterolateral quadrant of the meniscus due to communication of the sheath with the joint above and below the meniscus. This has made interpretation of this area more difficult⁷ and demanding.¹⁰ Any irregularity of the surface or the presence of dye or air within the substance of a meniscus is considered abnormal. Figure 4 presents three cases of medial meniscus injury with the positive contrast "dye" study on the left and the air contrast on the right. Figure 5 illustrates four other cases of meniscus injury. Synovial recesses (indentations in the meniscus at its junction with the coronary ligament) are normal. Alteration in overall size and shape of the meniscus is abnormal. Hypoplasia is not uncommon and is not considered pathologic.¹³ Discoid^{5,13} and cystic³ menisci can be confirmed.

RESULTS

All arthrograms were performed and interpreted by the writer on patients of a five man orthopedic group. Arthrography was done primarily for diagnostic problems, many menisci being removed for injury on the basis of clinical evaluation only. After evaluation of the first 100 arthrograms, it was found that 44 underwent surgery. In several other cases meniscus injuries were found, an operation advised, but the patient went elsewhere for surgery, refused surgery, or was otherwise lost to follow-up. In 6 cases operative and arthrographic findings did not coincide. In 2 cases early in the series a small appearing medial meniscus on x-ray was interpreted as the rim fragment of a bucket handle tear when in the first case it was a hypoplastic meniscus in an adolescent; and in the second case was a degenerative frayed meniscus of an elderly arthritic male. This diagnostic pitfall should not be repeated. In 2 cases an injury to the lateral

meniscus was interpreted as normal popliteal sheath when actually it represented a tear of the periphery extending from the sheath area. The fifth case was a tear on the undersurface of the meniscus interpreted at arthrography as artifactual bubbling of dye. The final case in a college athlete with loud audible popping in the lateral compartment of the knee, felt to have a probable lateral meniscus injury or arthrography and found at surgery to be normal. With experience some of these diagnostic shortcomings can be eliminated.

During this same time many patients were encountered who were clinically judged to have a meniscus injury, scheduled for surgery, and finally cancelled after arthrogram showed no meniscus abnormalities. These patients were followed for days to months finally becoming completely asymptomatic. Localization of the injured compartment is an important preoperative consideration. It is not uncommon for a torn lateral meniscus to give medial knee symptoms.¹² The rare bilateral case can also be diagnosed.

DISCUSSION

Arthrography of the knee was first described by Werndorff and Robinsohn in 1905. Popularity for and resurgence of interest in arthrography has, to a significant degree, been due to the work of Lindblom of Stockholm. In 1948 he published a classic monograph⁹ describing anatomic and roentgenographic details of arthrography. In this publication he reports surgeons at the Karolinska Institute decreased negative findings at arthrotomies from 16% to less than 1% with preoperative arthrography. Exploration of the knee through the usual anterior approach makes complete examination of the posterior one-third of the meniscus impossible. Removal of a normal meniscus on the basis that it is "likely torn" has not only not relieved the patient's presenting symptoms, but is not without late sequelae.^{14,6}

Arthrography of the knee is indicated whenever there is a doubt of meniscus pathology or whenever clinical evaluation is inconclusive for the presence or location of a meniscus lesion. Arthrograms have been most useful in the evaluation of the following conditions:

- (1) The Athlete: Prompt return to competition is often the primary concern of the amateur as well as the professional. Arthroto-

my of the knee for "exploration" in a negative case leads to useless convalescence time.

(2) Workmen's Compensation: Time saved

in treatment is money saved for the employer and insurance company. Definite treatment is prompt, without time consuming conservative

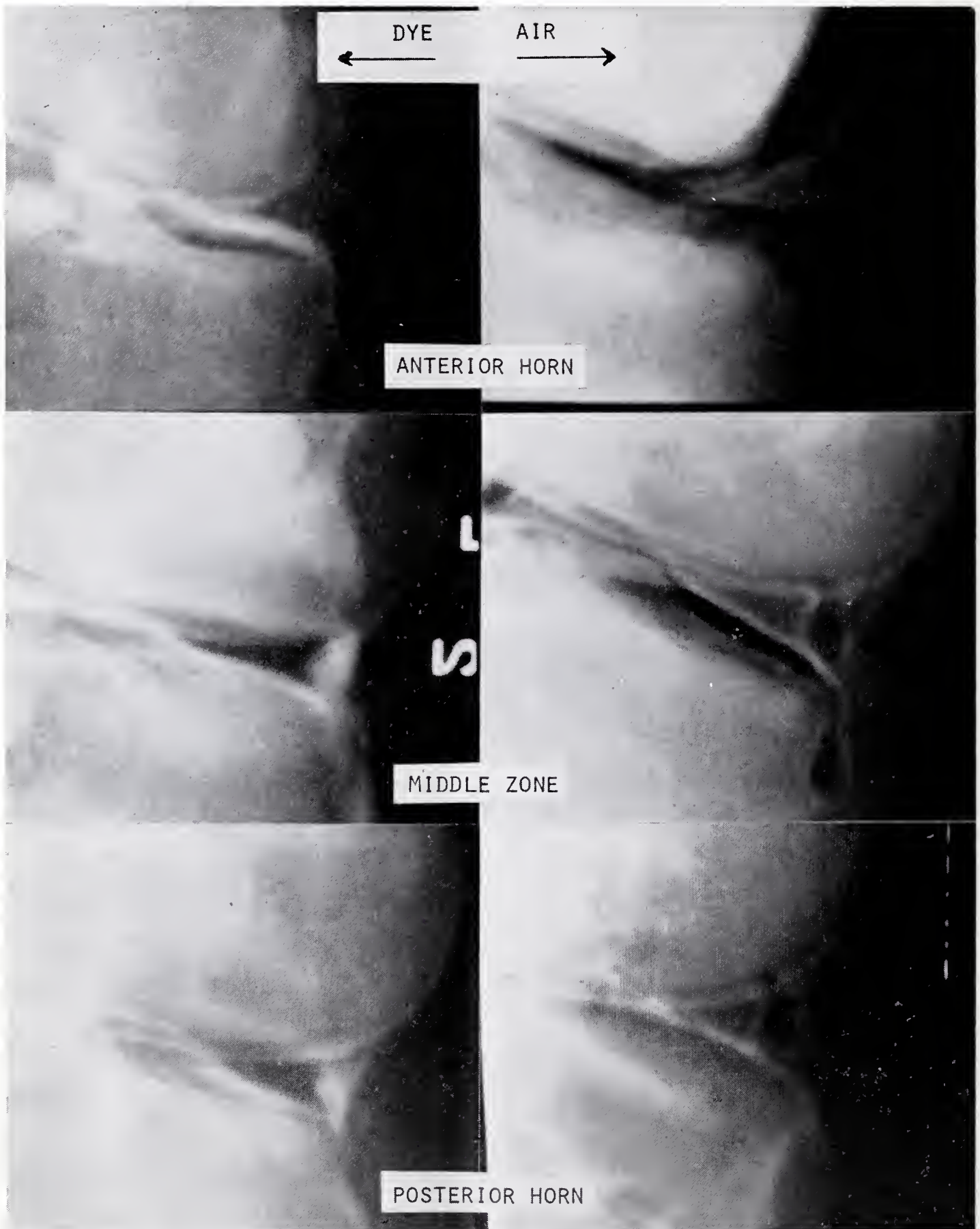


FIG. 3 NORMAL LATERAL MENISCUS

treatment for a torn meniscus or unnecessary surgery for the negative case.

(3) Liability: Vehicular injury patients fre-

quently remain symptomatic despite negative physical examination. Arthrography also can better explore the joint for meniscus injury



FIG. 4 TORN MEDIAL MENISCI

than can arthrotomy.

(4) The Female Knee: Most surgeons recognize that the female knee is often more confusing clinically and usually more difficult to rehabilitate post operatively. Long term results are also not as satisfactory as in the male.¹⁴

(5) Non-Traumatic Knee: The differential diagnosis between mechanical internal derangement and inflammatory non-traumatic disease is not always clear. A history of popping, "giving-way", and recurrent effusion without injury is perplexing.

(6) Post Operative Cases: In the post operative patient with or without new trauma, the arthrogram often proves to be of value in evaluating continued symptoms.

(7) Other Pathologic Lesions: We have not

found it practical to evaluate ligament injuries, osteochondral fractures, or synovitis as have others. We have, however, found the following problems interesting and beneficial to investigate preoperatively.

(a) Baker's (popliteal) Cyst: Lesions of the meniscus coexisting with/or producing popliteal cyst have been reported in 50-95% of adult cases.^{2,16} Butt and McIntyre reported Baker's cysts in 10% of patients with torn meniscus.⁴ A Baker's cyst should never be removed without also carefully evaluating the knee for the probability of intraarticular pathology.

(b) Meniscus Cysts: Though these cysts are rare, they account for about 1% of meniscectomies. They are three times more frequent on the lateral side and complete excision of

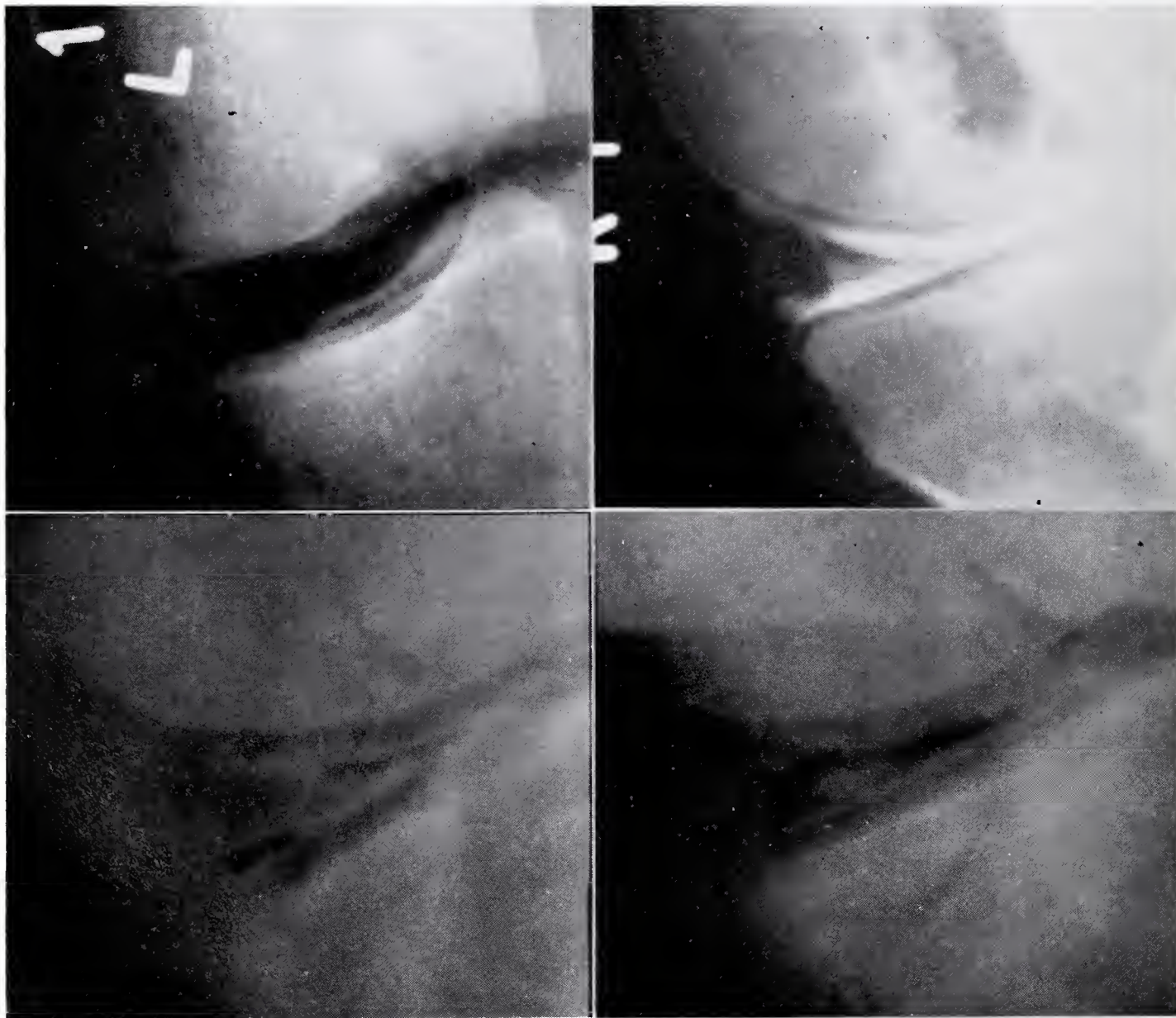


FIG. 5 ASSORTED MENISCUS INJURIES

the meniscus is necessary for cure. When present on the medial side they are usually very large and may be confused with Baker's cysts. Cysts with an associated meniscus tear will show puddling of dye.³

(c) Discoid Meniscus: These abnormally formed menisci occur in many shapes and forms. Sometimes referred to as meniscal dysplasia they occur more often laterally, but may be medial or bilateral.¹³ The diagnosis is suspected in a child with a popping, sometimes painful knee. Often diagnosis awaits an injury to produce tearing of this thick abnormal meniscus. Arthrography is very helpful in making the preoperative diagnosis.⁵

CONCLUSION

We have found double-contrast arthrography of the knee to be simple to perform and relatively easy to interpret with some experience. It is associated with negligible patient morbidity, inconvenience, and expense. We feel it substantially increased the percentage of preoperative diagnosis in meniscus lesions and prevented many negative knee operations. It allowed prompt and definitive treatment of many perplexing knee injuries.

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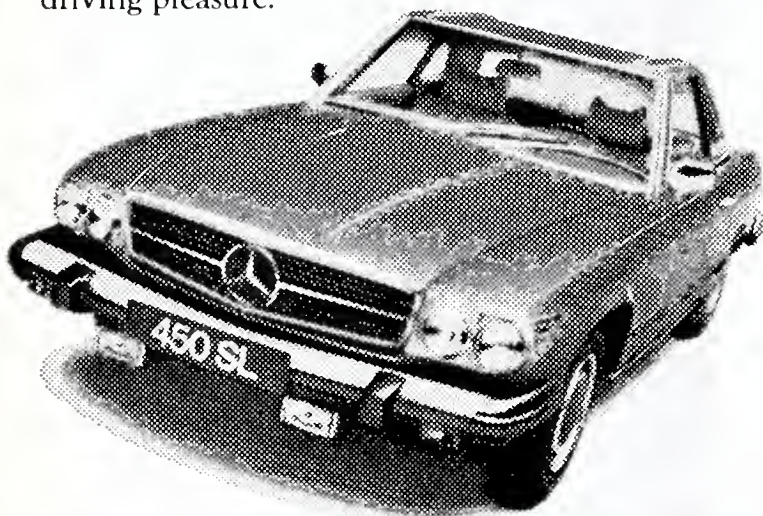
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Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria and paralytic ileus.

Dosage and administration: **Lomotil is contraindicated in children less than 2 years old.** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. Use a narcotic antagonist in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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454 R

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Lomotil puts him back in the game.

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Lomotil usually stops diarrhea promptly. This rapid action halts the emergency aspect of diarrhea

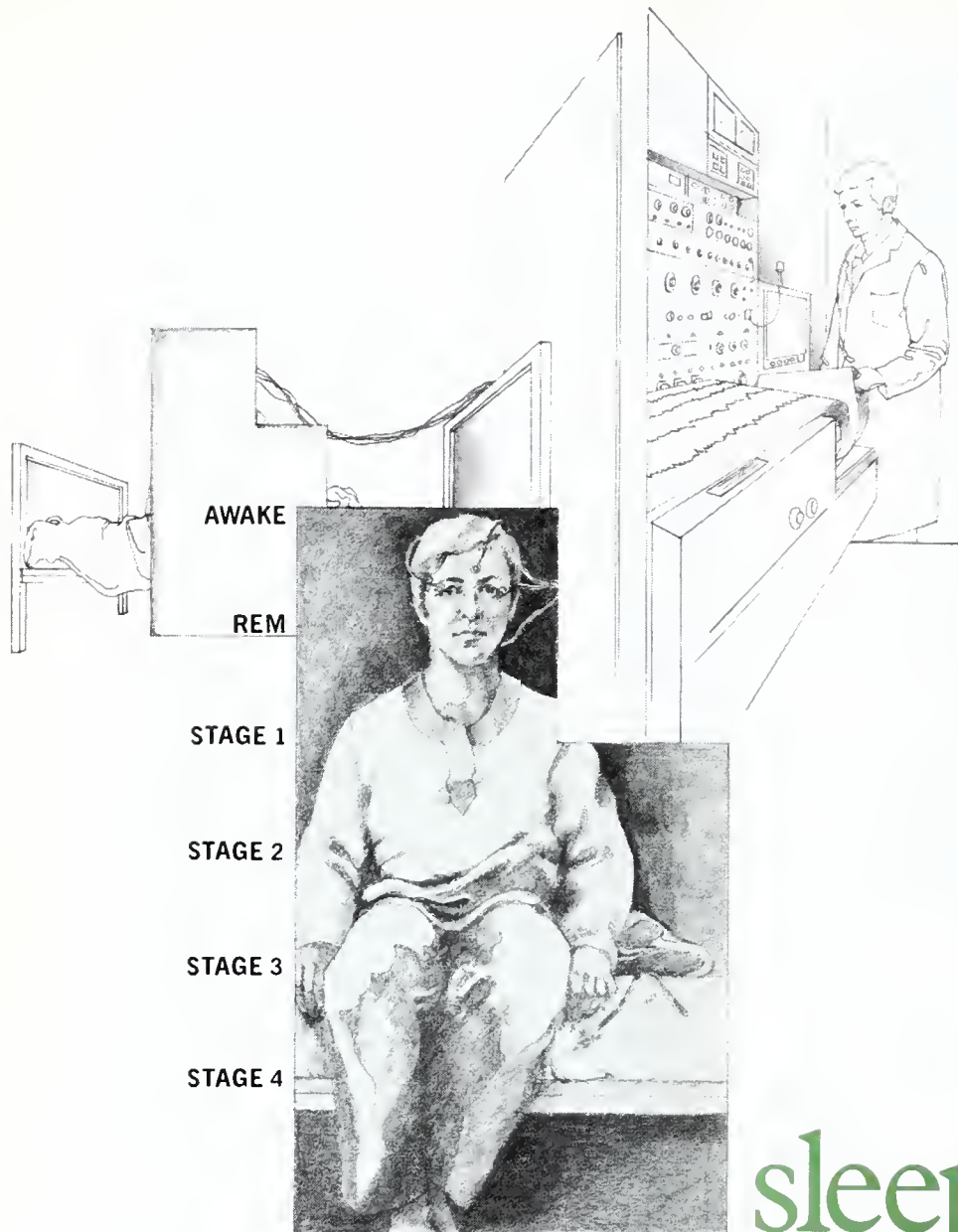
and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate antibiotic therapy should be given along with Lomotil.

Lomotil has few side effects, and those that do occur are generally mild.

Lomotil[®]
TABLETS/LIQUID

Each tablet and each 5 ml. of liquid contain:
diphenoxylate hydrochloride 2.5 mg.
(Warning: May be habit forming)
atropine sulfate 0.025 mg.

Usually stops diarrhea promptly.

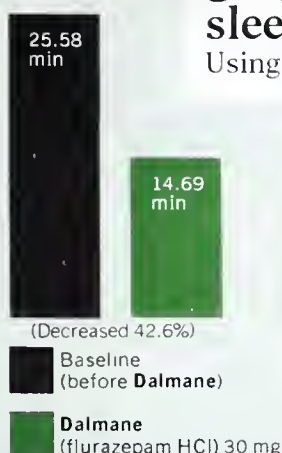


sleep
begins within
17 minutes, on average ...
an initial benefit of

Dalmane[®]
(flurazepam HCl) proved by a
**22-night clinical study of insomnia patients
in the sleep research laboratory and at home¹**

Three insomnia patients selected for difficulty falling asleep were administered Dalmane (flurazepam HCl) 30 mg for 14 consecutive nights. Placebo was given for four nights prior to and four nights after Dalmane. Physiologic tracings on Dalmane nights 1-3 showed sleep induction time averaged 13.90 minutes; on Dalmane nights 12-14, 18.80 minutes. Combined average for the 6 monitored drug nights was 16.35 minutes.¹

Average Time Required
to Fall Asleep (4 Studies,
16 Subjects²⁻⁵)



confirmed by clinical studies in four geographically separated sleep research laboratories²⁻⁵

Using a 14-night protocol involving eight insomniac and eight normal subjects, four studies confirmed the sleep-inducing effectiveness of Dalmane (flurazepam HCl) and the reproducibility of this response. On average, one 30-mg capsule induced sleep within 17 minutes. In all these studies, Dalmane induced sleep rapidly, reduced nighttime awakenings, and provided 7 to 8 hours of sleep without repeating dosage²⁻⁵

Dalmane (flurazepam HCl) induces and maintains sleep, with relative safety

Dalmane is generally well tolerated; morning "hang-over" has been relatively infrequent. While dizziness, drowsiness, lightheadedness and the like have been noted most often, particularly in the elderly and debilitated, physicians should be aware of the possibility of more serious reactions, as noted below.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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- induces sleep within 17 minutes, on average
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Before prescribing, see complete prescribing information in SK&F literature or PDR. The following is a brief summary.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities.

Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Anti-hypertensive effects may be enhanced in post-sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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No inconvenient potassium supplements
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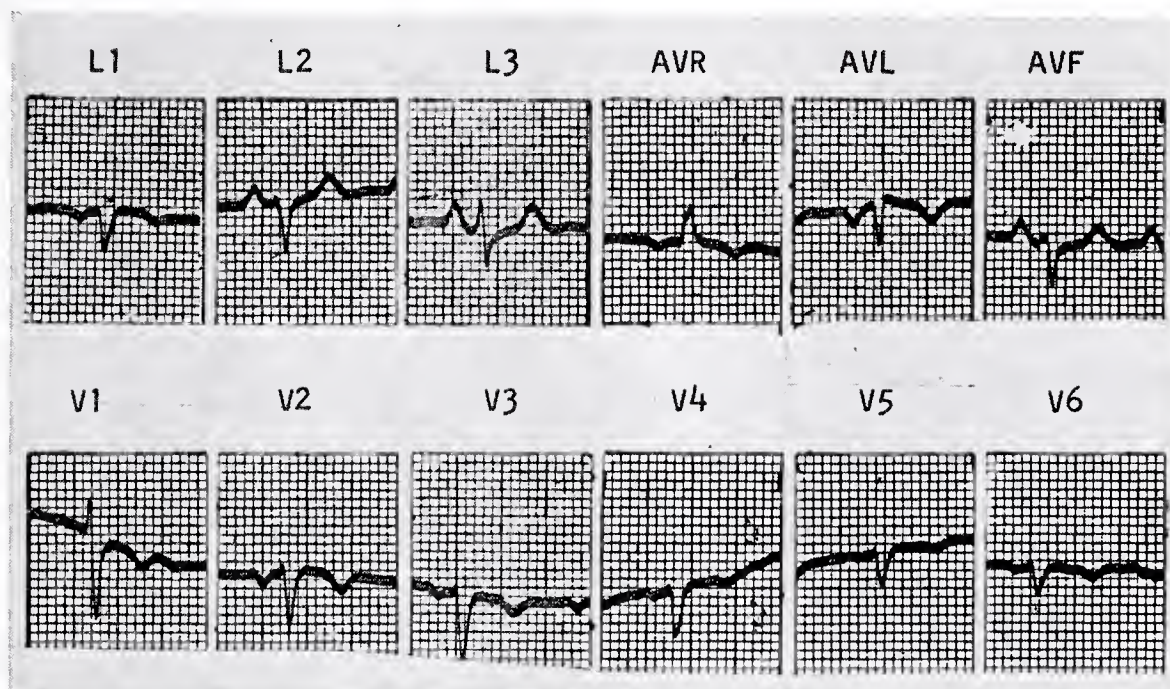
TO KEEP BLOOD PRESSURE DOWN AND KEEP POTASSIUM LEVELS UP



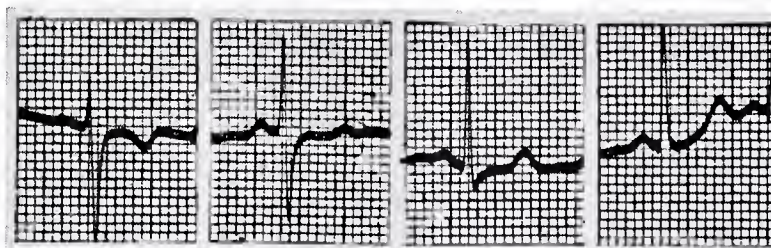
The Department of Cardiology, University of Arkansas Medical Center

(See answer on page 293)

This routine ECG was taken from an asymptomatic 46-year-old man. The bottom four tracings were taken in the V₃R, V₅R positions.



This electrocardiogram was taken on an asymptomatic middle aged male during a routine medical examination. What is the diagnosis? Are there additional leads that you could request to confirm the diagnosis?



R. T. Bulloch, M.D., Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



Arkansas Mosquito Control

Miss Charlotte Mills, Public Health Educator*

Because mosquitoes play such an important role in the transmission of encephalitis and other diseases, many Arkansas cities have begun mosquito control programs.

If a mosquito control program is to be effective, it *must be understood and supported* by the local people. People must be informed about mosquito biology and control, in order to properly handle and use insecticides and repellents.

Mosquitoes are small two-winged insects belonging to the order Diptera, family Culicidae. Mosquitoes are characterized by an elongate proboscis and scales on the wing veins and wing margin.

Mosquitoes have four distinct stages in their life: (1) egg, (2) larva, (3) pupae and (4) adult. The first three stages occur in the water. The adult is a flying insect feeding on the blood of man and animals.

Mosquito eggs consist of three groups: (1) those laid singly on the water surface, (2) eggs laid singly out of the water, (3) those laid together to form rafts which float on the water surface.

Anopheline eggs are examples of eggs laid singly on the water surface. They are elongated, oval and usually pointed at one end. Anopheline eggs are characterized by a pair of lateral floats. Hatching occurs within one to three days.

The eggs of non-anopheline mosquitoes possess an outer covering which resembles a network pattern on the surface. All species of *Aedes* lay their eggs singly out of the water on the ground, in tree holes or containers near the waterline. The eggs hatch after flooding.

The eggs of *Culex* mosquitoes are laid side by side to form a raft. The eggs remain afloat on the water surface until they hatch some 2 or 3 days later.

The larvae frees itself from the egg shell by means of a spine on the dorsal surface of the head. The pulsating movements of the body and the increase in internal pressure aids in hatching.

The larva period consists of four developmental stages or instars. Between each instar, the larva sheds its outer skin.

Mosquito larvae move in two ways; by movement with the mouth brushes and by jerks of the body. Larvae are free-air breathers, so they must attach themselves to the surface for time to breath. The spiracular plate and palmate hairs serve as attachments for anopheline larvae. The culicine larvae have an air tube which attaches them to the surface.

Mosquito larvae get their food from the water in which they live. Their main food is algae, bacteria and protozoa.

The pupae stage forms inside the fourth instar larva. There is no feeding during the pupal stage. The pupal stage involves the transformation of the organs and body systems from aquatic life functions to flying adult life. This period lasts from one day to a few weeks. The emergence of the adult from the pupae occurs when the pupal skin is broken and the adult works its way out. Often the pupal skin serves as a boat on which the adult remains until it is able to fly away.

The adult is the fourth stage of the mosquito life. The adult mosquito is a fragile insect with three pairs of long legs and one pair of wings. The adult mosquito consists of three distinct body regions: head, thorax and abdomen.

The head of the mosquito is round. It consists of a pair of compound eyes, a pair of antennae, a pair of palpi and the proboscis. The antennae are located between the eyes and serve as organs of hearing and smelling. They consist of 15

*Division of Vector Control and Recreation, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

segments, 14 of which are visible. The last segment of the antennae is a whorl of hairs—short and sparse in females, long and bushy in males. The proboscis consists of a labium which serves as a protective sheath for a group of six stylets. The stylets penetrate the skin of the host and form the duct through which saliva is injected into the wound. Only female mosquitoes bite or penetrate the skin of their host; mouthparts of male mosquitoes aren't capable of piercing the skin.

The thorax bears the wings and legs. The thorax is covered with hairs and scales which form definite color patterns useful in identification of species. The wings demonstrate characteristic venation. The veins are covered with scales which form definite patterns. Slightly behind and below the wings is a pair of structures known as halteres. These halteres vibrate rapidly and serve as organs of balance when the mosquito is in flight.

The elongated abdomen consists of 10 segments, of which 8 are visible. The last two segments have been greatly modified for sexual functions. The *Anopheles* mosquitoes have no scales on the upper surface of the abdomen. *Culex* mosquitoes have scales on the abdomen. The *Aedes* female abdomen is tapered or pointed. The abdomen of the *Culex* is blunt.

As adult mosquitoes emerge from the pupal stage, about an equal ratio of male and female mosquitoes are produced. The males usually appear first, remain near the breeding place and mate with the females soon after they emerge.

After mating, the female flies away in search of its preferred host for a blood meal. Some females require more than one blood meal before they can lay fertile eggs. After the feeding, the female returns to the breeding site or some suitable location to lay the eggs. This process of feeding, digesting, egg development and oviposition (egg-laying) is known as the gonotrophic cycle.

The flight range of mosquitoes is of interest to epidemiologists. The flight habits vary considerably due to influencing factors: distance of host from breeding site, wind direction, velocity and availability of outdoor resting sites.

Surveys are important in the planning, operation and evaluation of effective mosquito control programs. There are two types of surveys available: (1) the original basic survey—determines

species of mosquitoes, location, density and flight range and the (2) operational survey—continued daily evaluation for comparison from year to year.

Survey equipment consists of a collecting tube or aspirator, containers for mosquitoes, flashlight, record forms, map, bait traps, light traps, white enamel dipper and containers for larvae surveys.

The data collected from surveys are correlated with disease prevalence or complaints to determine the need for a control program and the type of control operations which would be the most effective.

Mosquito control involves reduction of breeding sites, control of mosquito larvae and control of adult mosquitoes.

Natural methods of control of mosquito larvae include distribution of mosquito-eating fish (such as *Gambusia*) and draining and filling of mosquito breeding places. Filling involves the use of sanitary and hydraulic landfills. Draining is accomplished by open ditching, subsoil drainage, pumping and diking.

Insecticides currently used as mosquito larvicides are organic phosphorus compounds, chlorinated hydrocarbons, Paris green, fuel oil and pyrethrum.** Organic phosphorus compounds include Abate, Dursban, fenthion (Baytex), malathion, methyl parathion and parathion. Chlorinated hydrocarbons include DDT, Dieldrin, lindane and methoxychlor.

The control of adult mosquitoes include screening, mosquito-proof clothing, bed nets, repellents, aerosols, fogging and misting, dusting, airplane applications and residual spraying.

Insecticides used in adult mosquito control include carbaryl (Sevin), DDT, Dursban, fenthion (Baytex), malathion (Cythion), naled (Dibrom), Resmethrin and Pyrethrins.

**Mosquitoes of Public Health Importance and Their Control, U.S. Department of Health, Education, and Welfare, Reprinted 1972.

ANSWER—Electrocardiogram of the Month

The P wave, QRS complex and T wave in Leads I and AVL are all negative. The R wave in AVR is tall. The precordial leads show failure to develop significant R waves over the left precordium. The changes in the standard and unipolar leads alone could be explained by reversal of the left and right arm leads. However, with the failure to develop significant R waves in the left precordial leads, the ECG is indicative of dextrocardia. Right precordial leads which show development of prominent R waves are confirmatory.



EDITORIAL

Reperfusion of the Damaged Heart

Alfred Kahn, Jr., M.D.

The results of coronary artery bypass surgery are being carefully assessed in many centers. The principal proved benefit is relief of pain. A second even more important aim would be to prolong life by this type of surgery. In pre-infarction angina pectoris, if it can be diagnosed, this type of surgery may prove to be valuable.

Probably, our current type of bypass surgery might be adaptable to a different situation with life saving benefit, namely, early surgery after infarction. If blood is perfused into an early infarction, would it result in significant benefit to the patient? There are some studies which bear on this topic.

Smith, Soeter, Haston and McNamara (*Journal of Clinical Investigation*, Volume 54, Page 1420, December, 1974) published a study entitled, "Coronary Reperfusion In Primates." They used 29 small monkeys. One monkey was used as a control and the others underwent a temporary ligation of the left anterior descending artery. The tourniquets were left on varying periods. In one group it remained on one hour, another two hours, still another four hours and in one group the vessels were occluded for six hours. The animals were studied by unipolar electrocardiogram from ten reproducible mapping points using a probe; the hearts were also studied by mapping the injured areas with tetracycline—using fluorescent photographs; lastly, the hearts were excised after seven days and studied microscopically. The authors tried to determine how much of the myocardium had undergone irreversible changes and how much had been injured. They used the S-T Segment elevation and its subsequent fall as yardsticks. The electrocardiographic studies correlated with the microscopic studies and the fluorescent photo-

graphs. The S-T Segment elevation was maximal in two hours after occlusion and then receded; the authors state this corresponds to infarction progressing in the injured areas. During reperfusion, the S-T Segments declined, and this was interpreted as reversible injury. They feel that using a unipolar complex their studies enabled them to distinguish the infarcted areas from the injured areas. They found that "in the present study salvage of only 50% of acutely injured myocardium was accomplished with reperfusion after two hours of occlusion." The main contribution of the article is that it is an excellent study in methodology and the techniques could be used as a basis for interpreting the results of acute occlusion.

The so-called "no-reflow" phenomenon is the basis of a study by Kloner, Ganote and Jennings (*Journal of Clinical Investigation*, Volume 54, Page 1496, December, 1974). "No-reflow" means the inability of blood to perfuse an area of ischemic tissue—as the myocardium in this paper. The authors used dogs in this study. Carbon black and Thioflavin S were to follow distribution of blood in the myocardium injured by temporary coronary artery occlusion. They found that good reperfusion occurred in the injured myocardium if the occlusion lasted only forty minutes. If the occlusion lasted ninety minutes, reperfusion was not successful in parts of the inner portion of the myocardium. The nonreperfused areas were microscopically studied—using the electron microscope; these areas showed severe capillary damage; there were enlarged endothelial capillary cells, fibrin thrombi and swollen myocardial cells.

It appears that early bypass surgery, if success-

ful, might salvage a sizeable portion of the myocardium injured by ischemia. The problems which this hope poses is (1) the surgical tech-

nique is complicated, (2) it would be hard to operate on an injured heart within the time limit before irreversible injury occurs.



The Doctor's Responsibility — Breast Self-Examination

William I. Wade, M.D.*

The American Cancer Society recently sponsored an Education Conference in Minneapolis involving representatives from every state in the union. I was very impressed by the many concerned, intelligent, non-medical volunteers taking several days away from their homes, traveling so far to become better educated about community cancer detection and prevention.

With an estimated 90,000 new cases of breast cancer and 33,000 deaths in 1974, breast cancer is the foremost site of cancer incidence and death in American women. Despite all efforts to date, there has not been a significant reduction in the mortality rate in the past 35 years. Although breast cancer is found most often in women of middle age and over, who are the main educational target, the ACS has begun turning its efforts toward girls of high school age and young women to learn the techniques of breast self-examination as a future health habit. At present rates, ONE OF EVERY 15 American women will develop breast cancer at some time.

In the past the American Cancer Society and physicians have done a relatively good job impressing women of the importance of regular pap smears. Most everyone is familiar with the dangers of cigarette smoking and the Conference emphasized the importance of setting up Smoking Withdrawal clinics in communities. The ACS is continually emphasizing the Seven Warning Signals and regular checkups. However, Breast Cancer remains the number one cause of cancer deaths in women. Possibly this area of breast exam has been neglected by some physicians because they have not been properly informed of the exact procedure.

Since the ACS is encouraging people to see their physicians for regular examinations, it

would be beneficial to the medical community to be aware of some vital statistics that came to light in a recent Gallup Poll. The survey identified Breast Cancer concerns among women 18 years and older. This information has provided a basis for redirected ACS communications designed to save more lives. Four key factors account for the failure of aware women to practice breast self-examination.

1. *IGNORANCE* of the importance of frequent examination. Only 12% realize that the desirable frequency is monthly.
 2. *FEAR AND ANXIETY*: Such women require an approach that is anxiety reducing.
 3. *LACK OF INFORMATION*: For many women "awareness" of BSE means only a generalized perception of the procedure rather than having specific knowledge.
- *****DOCTORS AND THE MASS MEDIA ARE THE PRIME SOURCE of first information about BSE according to the Gallup report, but MOST PHYSICIANS DO NOT instruct patients in BSE.

I have requested the ACS Breast Self-Examination pamphlets and instructed my female patients on this procedure. It takes no longer than three to five minutes of my time or my nurse can help them learn the technique with less than one to two minutes of my time involved. I stress the importance before my nurse talks to them, gives the pamphlet and shows them the technique.

The American Cancer Society will send pamphlets on Breast Self-Examination to any physician requesting them. It behooves the medical community to pursue this most important public health function.

Please contact: American Cancer Society, P. O. Box 3822, Little Rock, Arkansas 72203, phone 376-0554. Excellent professional films and other publications also available.

*424 North University, Little Rock, Arkansas 72205.

MEDICINE IN THE



TEL MED IN FORT SMITH

Tel Med, a collection of tape-recorded health messages available over the telephone, is now operational at the Sparks Regional Medical Center in Fort Smith. Dr. James W. Long, chairman of the Sebastian County Medical Society Library Committee, notes that all messages have been screened and approved by that committee. The system serves a six-county area.

VIOLATIONS IN PRESCRIBING SCHEDULE II DRUGS

The following letter addressed to Mr. Paul Schaefer as Executive Vice President of the Arkansas Medical Society is reproduced in its entirety for your information. The letter was received from Mr. Woodrow T. Little, Director, Bureau of Narcotics and Dangerous Drugs, State of Arkansas:

"During the past few months a series of spot checks throughout the State of Arkansas has been conducted in an effort to determine to what extent Arkansas Medical Practitioners are in violation of the 1970 Controlled Substances Act, under the United States Department of Justice and the Drug Enforcement Administration. The survey conducted by federal and state authorities indicates that a large number of medical practitioners throughout the state either knowingly or unknowingly are in violation of various points of the Controlled Substances Act and regulations.

"Federal prosecution and/or statewide publication of medical practitioners who have been found to be in violation of various sections of the federal act could be very embarrassing to a large number of medical practitioners and, perhaps, even to some extent, to the entire medical profession in Arkansas.

"Many prescriptions similar to the enclosed copies have been picked up around the state and several medical practitioners, as well as dispensers, have been called before their respective disciplinary boards rather than being charged by federal authorities for the illegal prescribing of Controlled Substances. A prescription for a

Schedule II drug *must* contain all of the following information:

The patient's name

The patient's complete, current address

The date of the prescribing

The amount, name, strength, and proper instructions for taking the drug

The prescriber's DEA number, office address, and proper legal signature.

"It has been determined by proper legal authorities that a prescription for Controlled Substances *must* be signed as a legal document by the prescriber. In other words, the signature appearing on the practitioner's application for licensure and the signature appearing on a deed to a practitioner's home would substantiate a proper signature on a prescription for Controlled Substances. The so-called "branding iron" symbol or the scribbling similar to the samples enclosed, simply cannot be accepted as a legal, legible signature of the prescriber.

"A prescription for a Controlled drug should be complete and properly prepared before leaving the practitioner's office; otherwise, the consumer could wind up in violation of federal law for attempting to obtain a Controlled Substance with an illegal prescription. The practice of calling Schedule II drugs to the pharmacy over the telephone is in direct violation of federal and state law. The penalty for first offenders of the Controlled Substances Act is quite severe and graduates tremendously; for instance, the first offender, simply for violations such as those mentioned above, according to existing, federal statutes, could be as severely punished as a \$5000 fine and three years.

"I hope it is possible for you in some way to make every practitioner who is licensed to prescribe Controlled Substances aware of the above-mentioned items. The Department of Justice, through the Drug Enforcement Administration, from Washington, D. C., and through our state, signed work agreement with that agency, has made it pretty plain to us that if we cannot clean

our own house, so to speak, that they fully intend to do the housecleaning for us. Anything your department can do to make our fine practitioners aware of this danger would be appreciated. It is not the desire of this department to see how many practitioners can be prosecuted for violations of federal and state law. It is our desire to see how few it becomes necessary to take any type of drastic action against in order to obtain compliance of federal and state law.

"Sincerely yours,
Woodrow T. Little"

Medical Memorabilia Urgently Needed

The State Medical Society Meeting of April 20-23 will celebrate the 100th anniversary of our State Medical Society. A portion of the program of this meeting will deal with the history and the development of medicine during these past 100 years.

We are asking each Society member to bring with him any historical medical document, old pictures, medical memorabilia, old books, old instruments, or any other item of medical nostalgic interest that he may have. Every doctor's family in the State has its share of such items of the past.

This exhibit is being collected by Dr. Henry Kirby and Dr. Allen Robinson, both of Harrison, Dr. Robert McCrary of Hot Springs, and Mr. John McIntosh of the Fort Smith office. Full security for these items has been assured.

This is the first and final call to the membership. Kindly let any of these men hear from you regarding what you will have to show at the meeting.

Thank you.

Robert Watson, M.D.
Chairman, Historical Program

DOCTORS HOSPITAL NOW OPEN

The new Doctors Hospital in Little Rock became operational in December 1974. Dr. John V. Satterfield of Little Rock, president of the Little Rock Land Company, owners of the facility, announced that the hospital will initially open 100 beds and expand to the full bed complement of 300 beds over a period of six months.

The hospital is located at 500 South University in Little Rock. William F. Moreland, formerly associated with the Methodist Hospital in Houston, Texas, was named as the new administrator. The hospital has entered into an agreement with a national hospital management firm, Hospital Affiliates, Inc., to provide the operational management.

The Doctors Hospital will be a tax-paying institution and will be the only investor-owned hospital in Pulaski County. Total cost for equipment and the building itself will be approximately 13 million dollars.



THINGS



TO

COME

Dermatopathology Symposium

A three-day dermatopathology symposium entitled "Histologic Diagnosis of Inflammatory Skin Diseases," sponsored by the departments of dermatology and pathology of New York University School of Medicine, will be held June 26-28, 1975. Directed by Dr. A. Bernard Ackerman, associate professor of dermatology and pathology, it will take place in Alumni Hall, New York University Medical Center, 550 First Avenue, New York, New York.

The tuition is \$200. For residents in training, \$100. For further details write Office of the Associate Dean, New York University Postgraduate Medical School, 550 First Avenue, New York, New York 10016. Telephone AC 212 679-3200, ext. 4037.



PERSONAL AND NEWS ITEMS

Dr. Holt Joins Medical School

Dr. Forney G. Holt of Hope has been appointed assistant professor in the Department of Family and Community Medicine at the University of Arkansas School of Medicine. Dr. Holt will be charged with clinical and teaching responsibilities in the family practice program at Little Rock.

Dr. Bogaev New Chief-of-Staff

Dr. Leonard R. Bogaev of Jonesboro has been elected chief-of-staff of the St. Bernard Regional Medical Center in Jonesboro. Dr. John C. Faris was elected vice chief-of-staff, and Dr. James A.

Holland was elected secretary-treasurer, both are from Jonesboro.

Dr. Crow Heads Staff

Dr. Neil Crow of Fort Smith has been elected chief-of-staff of Sparks Regional Medical Center in Fort Smith. Dr. William Turner was named chief-of-staff elect and Dr. Ralph Kramer was named secretary, both are from Fort Smith.

Dr. Jansen New SMA Officer

Dr. G. Thomas Jansen of Little Rock was elected First Vice President of the Southern Medical Association at their sixty-eighth annual meeting held in Atlanta, Georgia.



O B I T U A R Y

Dr. Adron M. Bradley

Dr. Adron M. Bradley of Forrest City died December 25, 1974, at the age of forty-eight.

Dr. Bradley was a 1951 graduate of the University of Arkansas School of Medicine. He had practiced medicine in Forrest City for the past twenty-two years. A World War II veteran, he was a member of the St. Francis County Medical Society, the Arkansas Medical Society, and the American Medical Association.

Dr. Bradley is survived by his wife, Francis, a daughter, and two brothers, Arthur E. and Dr. C. Allen Bradley, both of Little Rock.

Correction

Dr. Marolyn N. Speer is in the solo practice of Radiology at Clark County Memorial Hospital in Arkadelphia. Dr. Speer was incorrectly listed as being associated with the Arkadelphia Medical Clinic in the November 1974 issue of the Journal.



March, 1975

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 71 No. 10

FORT SMITH, ARKANSAS

ARKANSAS MEDICAL SOCIETY
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ANNUAL SESSION
APRIL 20-23, 1975
ARLINGTON HOTEL, HOT SPRINGS

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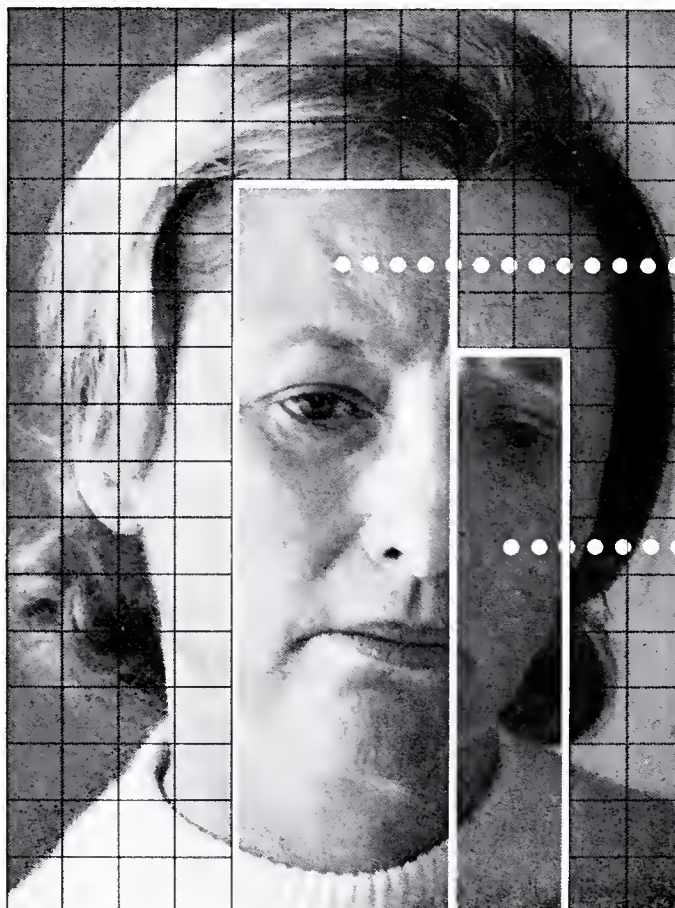
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Both often



- Predominant psychoneurotic anxiety

- Associated depressive symptoms

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neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive dis-

orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent

in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



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in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, arcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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ALFRED KAHN, JR., M.D., Editor
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MR. PAUL C. SCHAEFER, Business Manager
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114 E. Second St. Little Rock, Arkansas

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 71, No. 10. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

Pancreatitis and Choledochal Cyst with Gallstones: An Unusual Case

Major Lawrence M. Kotner, Jr., MC USAF,* and Captain John C. McFadden, MC USAF

Abstract — Summary

This paper reports the first case of a patient with a choledochal cyst containing gallstones presenting as acute pancreatitis. The combination of pancreatitis and choledochal cyst has been rarely reported in the literature.

Choledochal cyst, or cystic dilatation of the common bile duct, is an unusual congenital anomaly that occurs approximately once per fifteen-thousand pediatric hospital admissions or once per two hundred-thousand general hospital admissions.^{9,13} The usual patient with choledochal cyst (greater than eighty per cent) is less than thirty years old at time of diagnosis.¹ The incidence of choledochal cyst is three to four times higher in females than in males.^{14,16} The use of ultrasound, radioisotope scintigraphy, oral and intravenous cholangiography allows the earlier diagnosis of choledochal cyst to be made than in the past.^{7,11,18} In recent years the classic presenting clinical triad of jaundice, abdominal pain, and abdominal mass has been found in a decreasing percentage of patients.^{7,9,11,13,18}

Choledochal cyst is not usually listed as one of the conditions associated with pancreatitis. Only twelve documented cases of pancreatitis complicating choledochal cysts have been described in over six hundred reported cases of choledochal cysts in the English literature.^{2,3,4,6,10,15,17} Gallstones are not uncommonly found with choledochal cysts.^{12,14}

Case Report

A fifty-two year old white female presented

with severe abdominal pain and vomiting of twelve hours duration. She had no history of alcoholism, peptic disease or jaundice. Past history was noncontributory except for a cholecystectomy twenty years ago. The record of that operation had been destroyed, and it was not known if a choledochal cyst was present at the time of surgery. Initial physical examination revealed an acutely ill woman with generalized abdominal pain. Tenderness with rebound was present in the epigastrium. No masses were palpated, and the patient was not jaundiced. On admission the serum amylase was six hundred twenty-two amylase units (Caraway Method—the normal range for our laboratory is 60 to 160 units) and the alkaline phosphatase was 40 international units (normal 10 to 35). The other laboratory studies including total bilirubin, serum calcium, serum phosphorus, serum glutamic-oxaloacetic transaminase (SGOT) and serum glutamic-pyruvic transaminase (SGPT) were normal.

An upper gastrointestinal barium study showed edema of the mucosal folds of the third portion of the duodenum compatible with the clinical diagnosis of acute pancreatitis (Figure 1). The patient did well on nasogastric suction and intravenous fluids; her serum amylase returned to normal. An intravenous cholangiogram was then performed which showed a well delineated cystic dilatation of the common bile duct. Laminagrams demonstrated three distinct radiolucent filling defects within the cystic dilatation (Figure 2). The distal end of the common bile duct tapered concentrically to a tiny lumen. There was no obstruction to flow of contrast material into the duodenum.

At surgery a four by six centimeter dilatation of the common bile duct was found. The cyst

*From the Department of Radiology, University of Arkansas Medical Center, Little Rock, Arkansas (Dr. Kotner) and the Little Rock Air Force Base Hospital, Jacksonville, Arkansas (Dr. Kotner and Dr. McFadden).

Reprint requests to Lawrence M. Kotner, Jr., M.D., Radiology, University of Arkansas Medical Center, Little Rock, Arkansas 72201.

The opinions expressed herein are those of the authors and do not necessarily reflect the policies of the United States Air Force.



Figure 1

Upper gastrointestinal examination demonstrates mucosal edema in third portion of the duodenum without widening of the duodenal loop consistent with pancreatitis.



Figure 2

Tomographic section during intravenous cholangiogram shows a choledochal cyst containing three radiolucent gallstones. The distal common duct is narrowed concentrically.

was incised and three friable gallstones were removed. The common bile duct was patent. The cyst wall was biopsied, and a choledochalcyst-duodenostomy was then performed. The head of the pancreas was slightly indurated, but there was no evidence of tumor. Postoperatively the patient did well and was asymptomatic eight months after surgery. Histologic examination of the cyst wall showed a fibrous tissue wall without lining by epithelial cells consistent with choledochal cyst.

Discussion

Alonso-Lej *et al.* suggested that the most likely theory of etiology for choledochal cyst was a congenital weakening of the common duct wall with obstruction secondary to a kinking or narrowing of the distal common duct.¹ Theories to explain the occurrence of acute pancreatitis in patients with choledochal cyst include bile stasis within the pancreatic duct, pancreatic duct obstruction, activation of proelastin to elastin after increased pressure in the pancreatic duct,

and reflux of duodenal secretions into the pancreatic duct.^{6,10} In none of the twelve previously reported cases of pancreatitis and choledochal cyst was there a clear-cut etiology of the pancreatitis. In the present case, the narrowed distal portion of the common bile duct as revealed on the laminagrams may have been congenital or a result of chronic inflammation from the passage of previous gall stones. The gall stones present within the choledochal cyst probably contributed to the development of the acute pancreatitis.

The surgical treatment of choledochal cyst is still debated in the literature. The cyst-duodenostomy performed on our patient is felt to be the procedure of choice by most authors,^{5,10} although others prefer the cyst-jejunostomy in Roux-en-Y fashion.¹¹ Radical excision has been advocated by some because of the slightly increased incidence of carcinoma of the bile ducts found in patients with choledochal cysts.^{8,9}

Acknowledgment: The authors are grateful to Glenn V. Dalrymple, M.D., Professor and Chair-

man, Department of Radiology, Arkansas Medical Center for reviewing the manuscript.

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Gonococcal Arthritis in a Two-Week-Old Infant Treated by Arthrotomy

A. Stuart Fitzhugh, M.D.*, and Richard J. Nasca, M.D.**

Klieman and Lamb⁵ reported a 28-day-old male infant with gonorrheal arthritis, August 1973. Review of the pediatric literature revealed only 6 other cases of neonatal gonorrheal arthritis. Allue et al¹ reported 15 cases of gonorrhea in infants and children from Children's Memorial Hospital, University of Oklahoma Health Sciences Center. They emphasized the rising incidence of gonorrhea in all age groups. However, only one of these children, a six-year-old girl, had gonorrheal arthritis.

The following case is of interest because of the presentation of a newborn with an acute febrile illness without demonstrable cause and the method of treatment employed.

CASE REPORT

On October 3, 1973, a 16-day-old black male was admitted to Arkansas Children's Hospital with a three day history of unexplained fever, irritability and diarrhea. He had been seen the two previous days in the out-patient clinic. Spinal tap had revealed 3 polymorphs and 1 mononuclear cell. Spinal fluid sugar was 53 mg. % (blood sugar 96). CSF culture and blood cultures were negative. On the first day, CBC had been essentially normal but on the day of admission WBC was 17,000. Urinalysis revealed 1-2 WBC and 10-30 RBC. Physical examination was negative except for temperature of 102°. No antibiotics had been given. The blood culture showed no growth.

On October 5, 1973, the fifth day of his illness, swelling of the right knee was noted. It was hot and tender to manipulation. X-rays of the right knee and hip were negative. Needle aspiration revealed thick yellow gelatinous material that showed many acute inflammatory cells. The child was started pre-operatively on Gentomycin and Keflin on 10-6-73. At the time of arthrotomy, a thick coagulum of pus was found within the knee joint. This extended into the suprapatellar area of the femur and had dissected under the

periosteum overlying the distal femoral methphysis. The synovium was marsupialized and the infant was immobilized in a one and a half spica cast. Cultures of the aspirate and drainage revealed *Neisseria gonorrhea*. A few gram negative intra and extra-cellular diplococci were noted by the microbiologist subsequent to the incision and drainage on review of the smear made prior to the arthrotomy. On 10-9-73, aqueous penicillin 100,000 units every 4 hours was started. (200,000 units per kg per 24 hours.)

Temperature normalized on 10-11-73 and the knee healed rapidly by secondary intention. The child was discharged on 10-27-73. Follow-up at 6 weeks revealed a full range of motion of the right knee without tenderness or synovitis. X-rays of the right knee remain negative.

Mother had proven gonorrhea near the end of the first trimester. She was treated with 4.8 million units of procaine penicillin and 2 grams of Benamid p.o. Perinatal history was negative although mother had an unexplained fever on the third postpartum day. The mother was followed up after the infant's diagnosis was established and culture of the cervix was negative. However, treatment was repeated because of the infant's history.

DISCUSSION

High fever or any other symptom during the newborn period suggestive of sepsis is of grave concern. Organisms usually considered during this period are *E. Coli* and other gram negative organisms and group B, Beta hemolytic streptococci. These probabilities were the reason for the initial choice of antibiotics. Penicillin was substituted after definitive identification by culture.

One may question surgical drainage for gonorrheal pyarthrosis versus a more conservative therapy. Open drainage in this case allowed thorough removal of the products of inflammation and assessment of the articular cartilage and metaphyseal bone. It also provided free egress for discharge of new products of inflammation.

From the Departments of Pediatrics* and Orthopedics**, Arkansas Children's Hospital, University of Arkansas Medical Center, Little Rock, Arkansas 72201.

Marsupialization with the part immobilized allows for healing by secondary intention once the inflammatory response abates. Fistula formation has not resulted. Healing is rapid in infants and children and range of motion is quickly regained.

Paterson⁷ advocates surgical drainage of all infected joints because of dissatisfaction with results of treatment by aspiration and systemic antibiotics. Samilson, Bersani and Watkins,⁸ and Griffin⁴ recommend that all septic hips should be opened and drained because of the potential for dislocation. Griffin⁴ states that all joints that have had a delay after onset of symptoms of four or more days before treatment is started and septic joints that do not show dramatic improvement on conservative treatment, should be drained surgically.

In the review by Nelson and Koontz⁶ of 117 cases of septic arthritis, *Neisseria Gonorrhea* was found as the causative agent in six patients. Fink³ reported the clinical and laboratory results in detail on these six children, noting that all but one patient had polyarthritis and positive vaginal smears for G.C.

Bowers, Wilson and Greene,² have found that once the products of inflammation have accumulated in bone or within the joint, the

effectiveness of systemic antibiotics becomes reduced.

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ABSTRACT

This is a case of a two-week-old infant who presented with a high fever of unexplained origin suggesting sepsis. Joint involvement was only evident on the third day and aspirations yielded pus, but an organism was not identified until after culture results were reported. In the interim arthrotomy was performed. Penicillin therapy was carried out after culture was reported. The outcome was good.



Facial Restoration

Mr. Jack Diner*

Because the face is the first link in interpersonal communication, its physical disfigurement immediately attracts attention. This can easily prevent normal communication and social relationships. Facial defects occur in all age groups and result from birth defects, trauma, or cancer surgery.

Plastic surgical correction of such defects is ideal but not always applicable. Additionally, it is costly, laborious, time consuming and often requires multiple hospitalizations. In a patient with cancer, it may be undesirable to permanently cover the surgical defect and hide possible recurrence. Thus, artificial prostheses are invaluable to such patients in restoring their appearance, confidence, function and social acceptance. Such rehabilitation through artificial facial devices is the basis of maxillo-facial prosthetics.

Construction of maxillo-facial prostheses is the art and science of anatomic, functional, and cosmetic reconstruction by means of non-living substitutions of missing or defective regions of the head and neck. A prosthetist applies anatomical knowledge, technical ability, and artistic talent in the fabrication of such artificial facial parts.

Whatever the cause, loss of a nose, ear, eye, or other part of the face creates serious physical and psychological deficiencies. Such patients tend to withdraw from society and lead non-productive lives. Their feelings of shame, self-consciousness and social inadequacy must be conquered if the quality of their life is to improve. An effective and immediate remedy is highly desirable. If these detrimental feelings are to be overcome, a method of concealing the visible defect must be implemented. Only then will the patient return to work, participate in family and community activities, and perhaps avoid health problems such as alcoholism or drugs.

A prosthesis of the facial region must cover the defect completely and render it relatively invisible. The prosthesis must imitate the flexibility, pliability, texture, coloring and form of natural tissue. It must withstand environmental stress from sunlight, moisture, common chemicals, bacteria, mucus, and other body fluids. It must not affect viable tissue which it contacts.

The device itself should be comfortable to wear, easily cleaned, and durable. In short, the part should look natural and function well to ease the patient's physical and psychological burdens.

TEAM APPROACH

Whenever a surgeon anticipates the need of facial restoration by a patient, a discussion with the prosthetist is indicated. The ideal situation is obtained through pre-operative, planned and coordinated efforts of the maxillo-facial restoration team, usually consisting of surgeon, prosthetist, sometimes a radiotherapist, social worker or psychiatrist. Many factors are important in the final treatment method selected: the age of the patient, the availability of trained personnel, the condition of the local tissues, previous irradiation, the prognosis of the tumor, and the wishes of the patient. The patient benefits from the combined knowledge of specialists in varying fields. Pre-surgical consultation should involve a discussion about the extent of removal of surrounding tissues which from the rehabilitative point of view may be needed or may interfere with the prosthesis. This is especially true around the nose and ear.

In years past, extra-oral maxillo-facial appliances were fabricated from readily available easily worked materials. Woods, ivory, ceramics, wax compounds and metals such as copper, gold, silver and aluminum were among the materials used. Typically such devices corrected for only gross anatomical disfigurement. They were durable and strong, but were conspicuous due to poor coloring and shaping.

As softer and more pliable materials became available, attempts were made to create more realistic skin-like prostheses. Though great strides have been made in this direction, even the most life-like fabricated prosthesis is not a living, moving, blushing organ, nor does it have the warmth of real skin. The ideal material should possess the following characteristics:

- * Flexibility and Pliability
- * Firmness and Dimension Stability
- * Resistance to Tear and Abrasion
- * Lightness
- * Adaptability to Coloring and Translucency
- * Temperature Stability
- * Low Thermal Conductivity
- * Stability Under Environmental Stress

*University of Arkansas Medical Center, Little Rock, Arkansas 72205.

- * Biologically Inactive
- * Non Staining
- * Durability
- * Odorless and Tasteless
- * Compatability with Adhesives
- * Reasonable Shelf-life components
- * Ease and Reproducibility in Compounding and Curing
- * Ease of Molding and Duplicating
- * Ability to Form Quickly
- * Generally Esthetic
- * Availability and Low Cost*

Some of the plastics now used incorporate many of the above qualities. Improved materials plus skillful application of reconstructive principles have resulted in satisfactory prostheses. More surgeons are prescribing facial prostheses, both temporary and permanent, as part of their treatment program, because of the satisfactory results that have been achieved in this field of prosthetic rehabilitation.

THE EAR

Disfigurements of the ear range from congenital absence to surgically removed parts (usually of the helix or lobe). In the case of a completely new ear, an impression is made of the good ear and a positive model is made in stone. Then while viewing the positive stone model through a mirror an opposite replica is constructed in clay. The clay model is fitted to the patient for last adjustments and when approved a final prosthesis is fabricated and positioned on the patient with double adhesive tape. Fig. 1.

As much as three-quarters of sound perception can be lost if only the upper third of the ear is missing because of accident or disease.** This



Figure 1

is a simple prosthetic problem. The part can easily be fabricated using the remaining structure for stability.

The most desirable structure of the external ear to retain for esthetic purposes is the tragus. The anterior peripheral line of demarcation of the prosthesis can terminate just behind this structure. The best anatomic structure for retention of an artificial ear is the external auditory canal, because the prosthesis can be made to extend into it.

If a patient can breathe through "his nose" or hear through "his ear", he thinks of it less as a prosthesis and more as a part of himself. This, coupled with the necessary daily care of the prosthesis, soon makes the wearer much more concerned with his appearance and proper grooming, thus supporting a better psychological attitude.

THE NOSE

Disfigurements of the nose are two fold, exterior and interior.

In the case of an interior problem, this author has twice encountered patients with surgically removed columnellae. This situation causes collapse of the alae and therefore makes breathing difficult. A septal strut can be fabricated that is snugly fitted into the nose to restore the integrity of the nostrils and improve breathing. The alae of the nose are sometimes left, allegedly to aid stability and retention, but contribute neither, and also detract from the esthetics of the ultimate prosthesis. The line of demarcation between the periphery of the prosthesis and the remaining tissue is less noticeable if it occurs in a natural skin fold, such as the nasolabial fold. In order to accomplish this when the alae are left, it is necessary to cover the remnants of the alae, with the result that the nasal prosthesis becomes too bulky.

An instance of an exterior problem is the entire removal of the nose. A prosthesis is developed that matches the patient's former nose (by old photographs, family description or a new shape that may better fit the "new" face). The prosthesis is made hollow to minimize weight, allow for breathing through the prosthesis. It actually allows for a "warming chamber" for cold air, and assists somewhat in helping the voice sound more normal.

The prosthesis is anchored by the use of a double adhesive tape, to the tissue surrounding the defect. Eye glasses are also recommended to

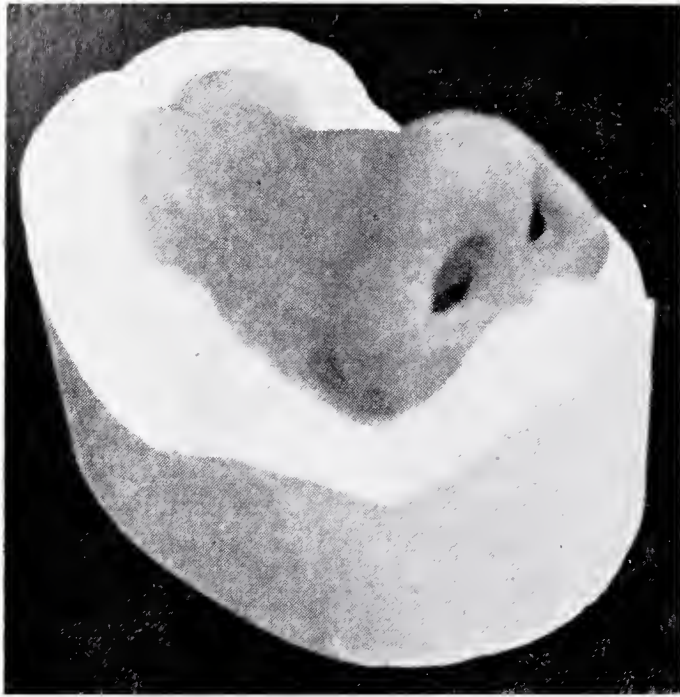


Figure 2

cover the superior margins and help retain the prosthesis. Fig. 2.

OTHERS

This author has participated in fabricating defects that cover half the face and entire lower jaw and neck. Whatever the facial defect, the above described procedures remain the same. Only the final anchoring of the prosthesis varies. Fig. 3.



Figure 3

THE EYE

The major goal in fitting an ocular prosthesis is to match the existing eye. Considerations for matching include:

- * Lid aperture should match that of the normal eye in both horizontal and vertical dimension.
- * Upper lid should completely close with normal blinking and when patient is sleeping.
- * Lid contours should be restored to match normal eye, without sunken areas or protrusions.
- * Shape of the prosthesis should allow maximum motility and stability.
- * Shape and thickness of eye should eliminate unnecessary dead space behind the prosthesis.
- * Details of iris color, dimensions, viewing plane, and scleral color tone should be matched.
- * The final prosthesis should be comfortable.

Above all, the prosthesis must be comfortable. If it is annoying, it cannot be worn. Poor fit may cause secretion, infection, or other harm to the socket. Therefore, cosmetic effect must sometimes be sacrificed in order that the eye can be tolerated. The patient must understand that the eye fitter is limited by socket and lid conditions.

The fitting of an artificial eye is based on the type of surgical operation performed. Ideally, information on the type of implant and surgical procedure should be made available to the fitter. He in turn will decide on the prosthesis based on the following five socket conditions:

1. Eye existing but blind due to accident or disease. Many eyes are injured and saved. This vision is lost but the eye otherwise is healthy. The cornea may be scarred, the color faded, the iris out of focus, all adding up to a non-pleasing appearance. Blind eyes seldom remain in position, and generally move out and up. Over a period of years, the eye may atrophy, allowing enough room for a stock eye to be fitted. Usually a very thin eye, such as a cosmetic cover lens (scleral shell) is used because of limited space. Diseased eyes also may be treated and retained for a number of years. There generally is corneal sensitivity, so the cornea must be bridged. Many microphthalmic eyes are not removed and a stock eye is fitted over them. In a microph-

thalmic case, a prosthesis should be fitted as early as possible in order that the socket and bone structure develop as normally as possible. Insufficient volume in the socket means there will be lack of support for the bony structure as it grows, and, as a result, the temporal side may settle. This also holds true for an eye lost in infancy.

2. Simple enucleation with no implant. An eye may be removed and the conjunctiva closed without the use of an implant. The major rectus muscles may be sutured together to form a stump that will be of some aid in moving the prosthesis. The prosthesis will generally be large and thick. In a simple enucleation, a sunken appearance is quite apt to be present or to develop in later years, due to the loss of the entire volume of the globe.
3. Enucleation with an implant. In most cases where an eye is removed, an implant is placed in the socket at time of surgery. The implant serves two purposes. First, it replaces part of the volume lost when the eye is removed. Second, it increases the mobility of the artificial eye. These implants fall into two groups: simple spheres, and muscle attached implants.
 - a. Spheres. These implants are plain round balls made of glass, gold or plastic. The sizes used run from 10 to 20 mm. The sphere is placed in Tenon's capsule; then the capsule and conjunctiva are closed over the sphere. The sphere is apt to migrate in the socket and not be centered on final healing. The outline of a sphere is usually evident in the socket. Unless the sphere used is very large, an eye is easily fitted and forms a ball and socket relationship. If a very large sphere is used, a shell type prosthesis is necessary.
 - b. Muscle Attached Implants. There are many designs of muscle-attached implants. Those now being used are completely buried and are made of plastic or combinations of plastic and mesh. The mesh serves as a base to which the rectus muscles are sutured. Those without mesh have tunnels or grooves in which the muscles lie. The muscles are sutured together in a central position. The prosthesis is shaped to conform with the anterior design of the implant, for maximum mobility.

4. Evisceration. In an evisceration, the contents of the globe are removed and replaced by a sphere. The scleral wall, muscles, and orbital fat remain in place. An evisceration may be done leaving the cornea in place, or it may be removed. The size of the sphere used will govern the type of eye to be fitted. If a large sphere is inserted, the eye may be almost full size, and a very thin prosthesis may be fitted. If a smaller sphere is used and the eye shrinks to a smaller size, or if the cornea is removed, a stock eye can be fitted.
5. Exenteration. In an exenteration, the entire contents of the orbit are removed. If the lids are saved a large thick eye can be made to fill the cavity. This prosthesis of course will not move. This type of cavity usually is covered with a skin graft and leaves a smooth depression where a facial restoration can be fitted. Fig. 4.



Figure 4

CONCLUSION

Medical science demonstrates that fiction can be turned into fact. It is prophesied that man will be able to live longer due to the development of synthetic organs. Sophisticated facial prostheses will be included in this progressive field. Perhaps the next century will make synthetic substitutes past history with the transplantation of organs as established practice. Or, perhaps some of the latest developments of growing skin or the use of carbonated teflon inserts will replace currently used plastics. In the meantime, we must continue to work within the limitations of our present technology.

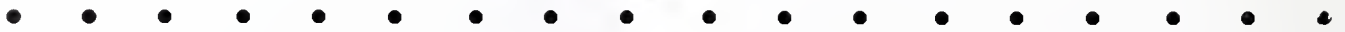
*Arthur D. Little, Inc., Cambridge, Mass.

**Rahn & Boucher, *Maxillofacial Prosthetics, Principles & Concepts*, (Chapter 11, pg. 7), W. B. Saunders Company 1970.



ELECTROCARDIOGRAM

OF THE MONTH

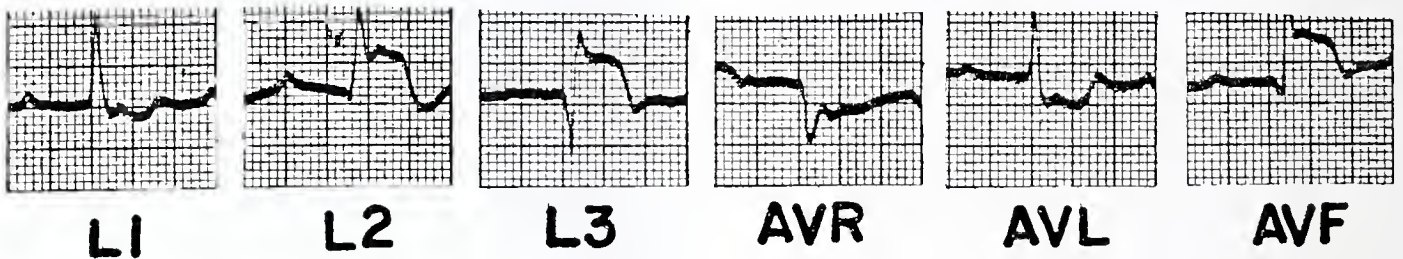


The Department of Cardiology, University of Arkansas Medical Center

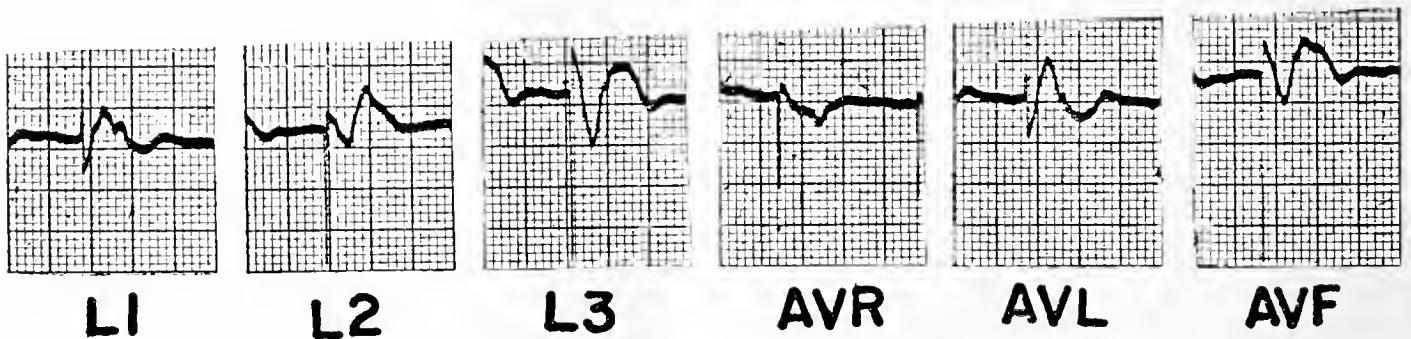
(See answer on page 330)

The upper ECG was taken following chest pain in a 65-year-old male. The lower ECG was taken several hours later. Paying particular attention to the rhythm, in addition to more obvious changes, what is the diagnosis, and what procedure was performed between the two tracings?

Upper tracing



Lower tracing



R. T. Bulloch, M.D., Professor of Medicine
Chief, Cardiology Division
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205

Office Orthopaedics

Clinical Evaluation of Low Back Pain

Leighton Millard, M.D.*

There is no easy way. This author found an article in the Journal of Bone and Joint Surgery, July, 1951, that listed sixty (60) causes of low back and sciatic pain. (Table 1).

Obviously some logical approach to the patient

*Little Rock Orthopedic Clinic, P.A., Post Office Box 5270, Little Rock, Arkansas 72205.

with low back pain (with or without sciatica) is necessary.

To begin with, each patient should be examined by history and physical, and x-rays, from the standpoint of: "what is the worst possible diagnosis that can be made." An attempt should

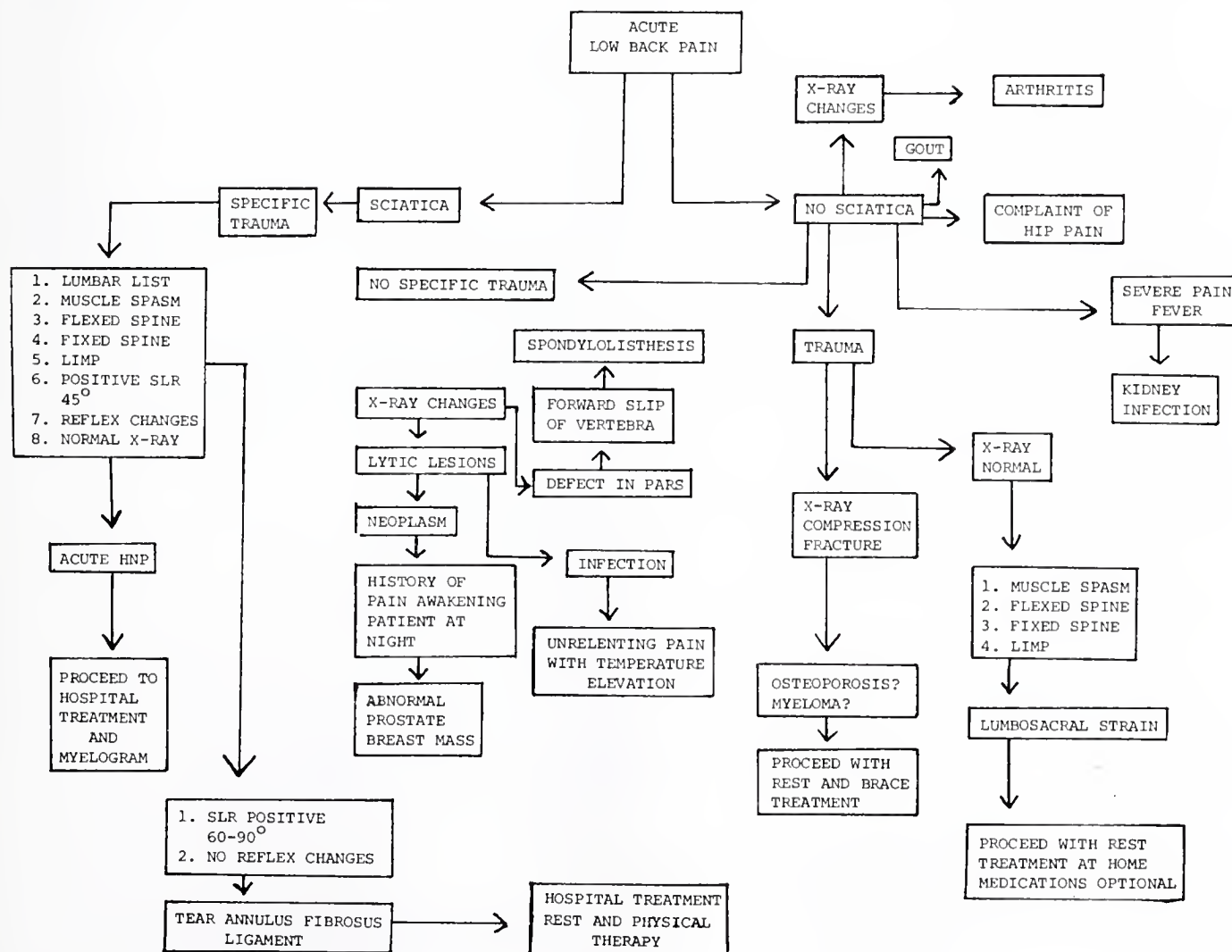


TABLE 1

ETIOLOGICAL CLASSIFICATION OF CAUSES OF LOW-BACK AND SCIATIC PAIN

SYSTEMIC DISEASE:

Small-pox prodrome
 Many fevers, acute
 Typhoid
 Tuberculosis
 Syphilis:
 Pachymeningitis
 Tabes
 Gumma
 Myositis
 Neuritis
 Von Recklinghausen's
 Meningitis
 Malignancy
 Guillain-Barre

LOCAL NEOPLASM

Uterus
 Ovary
 Rectum
 Prostate
 Extramedullary
 Conus and cauda
 Neuroma
 Vertebral, benign:
 Osteoma
 Osteochondroma
 Giant-cell
 Vertebral, malignant:
 Metastatic (from prostate, breast, etc.)
 Myeloma
 Primary osteogenic sarcoma
 Ewing's sarcoma
 Hemangioma or glomus

LOCAL INFLAMMATION, etc.

Myelitis
 Hematomyelia
 Subarachnoid hemorrhage
 Arachnoiditis
 Epidural abscess
 Lipiodol residue
 Lumbar puncture
 Herpes zoster
 Salpingitis
 Prostatitis
 Retroperitoneal abscess
 Ligamentous relaxation due to pregnancy
 Hypertrophied ligamentum flavum
 Aneurysm of iliac artery

MUSCLE SPASM OR ISCHAEMIA FROM:

Trauma, acute:
 Fracture (pedicles, spondylolisthesis)
 Dislocation
 Sprain (sacro-iliac)
 Laceration
 Wounds
 Disc compression or extrusion
 Coccygodynia from spasm of:
 Levator ani
 Coccygeus
 Piriformis

TRAUMA, CHRONIC, DUE TO:

Obesity
 Pregnancy
 Multiparity
 Occupation:
 Mail carriers
 Chauffeurs
 Miners
 Foot pronation
 Contracted tensor fasciae latae
 Gluteal injections

CONGENITAL DEFORMITY (Seldom the real cause, but increases susceptibility)

Spina bifida
 Meningocele
 Sacralization of fifth lumbar
 Lumbarization of first sacral
 Anomalous facets (Spondylolisthesis)

ARTHRITIS

Atrophic or rheumatoid
 Periarticular
 Of small posterior joints
 Sacro-iliac
 Marie-Strumpell type (spondylitis ankylopoietica)
 Hypertrophic or osteo-arthritis
 Sacro-iliac (in aged)
 (Lipping, probably not a cause of pain)
 Gout

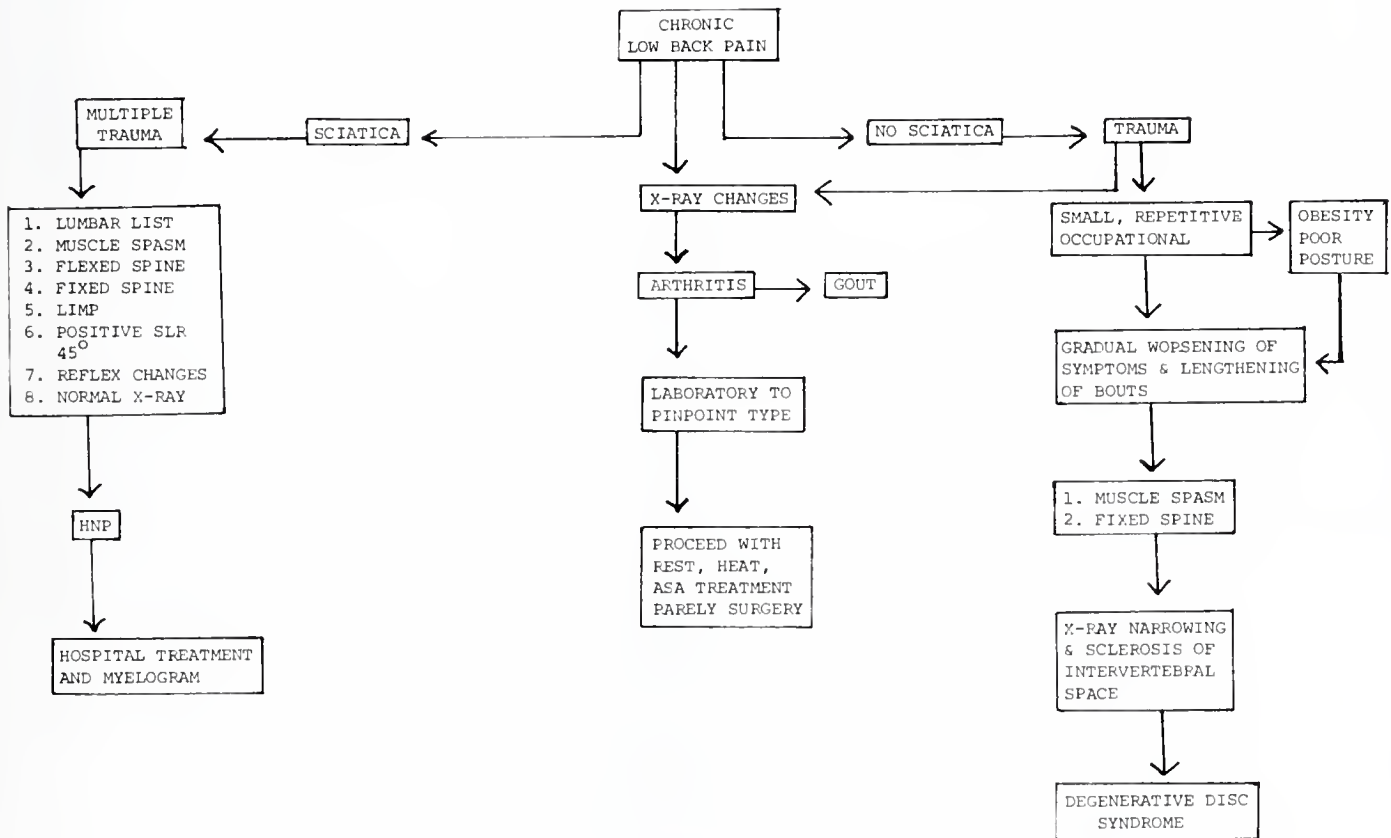
—The Journal of Bone and Joint Surgery
 Vol. 33-A, No. 3, July 1951

be made to eliminate neoplasm, infection, and fracture, in that order. Next, in my opinion, in order of seriousness is spondylolisthesis. After eliminating these diagnoses, our attention should be directed to delineating a mechanical cause for symptoms. The term mechanical is useful to summarize those conditions that involve joints, ligaments, muscles, or all three in combination.

I have tried to simplify this by using a "flow chart" system. This system will not outline in detail *all* causes of low back pain, but is, I believe, a workable approach to the problem.

Since the emphasis of this article is on diagnosis, treatment will not be discussed in detail. Future articles will take up treatment and prognosis of various causes of low back and sciatic pain.

- a. The ligamentous structures that hold the nucleus pulposus in place between the vertebrae.
- b. Rest—strict bed rest in the jackknife position.
- c. Pars—Pars interarticularis. Defect in this area allows forward slip of the vertebra; spondylolisthesis.





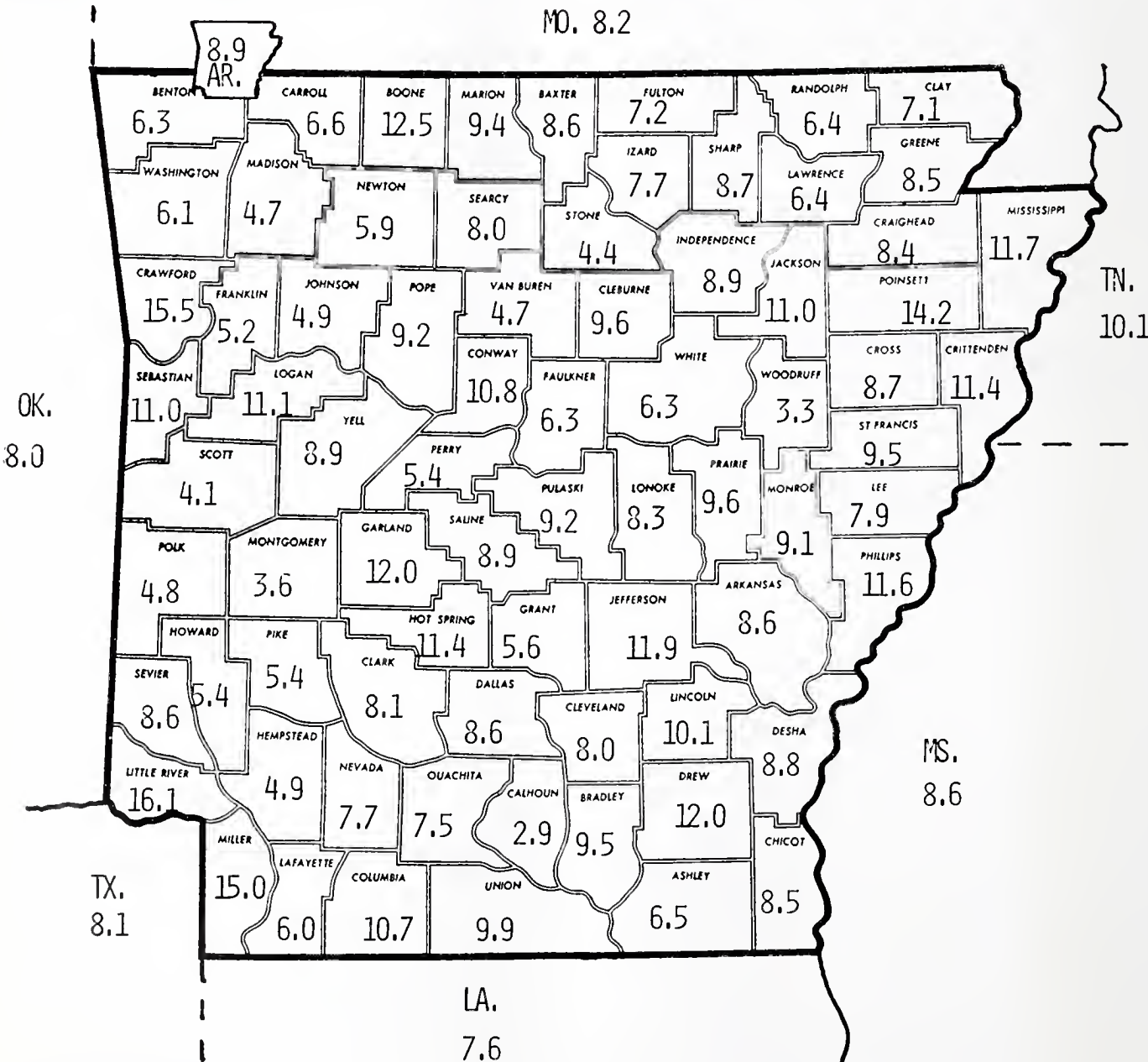
Mortality Rates From Carcinoma of the Uterine Cervix In Arkansas: 1950-1969

Ruth C. Steinkamp, M.D., F.A.C.P.*

Recent publication of cancer mortality rates by county of usual residence for each of the 48 contiguous states and the District of Columbia provides a new dimension for epidemiologic and

other studies.** Cancer mortality rates have not previously been available for such small geographical units. The Arkansas Medical Society, the Arkansas Cancer Society, Inc., the State and local health departments and numerous educational, volunteer and other groups are working to increase earlier detection of carcinoma of the cervix. Mortality rates for carcinoma of the

*Public Health Physician Administrator, Division of Maternal and Child Health, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.
**Mason, Thomas J. and Frank W. McKay, U. S. Cancer Mortality by County: 1950-1969, DHEW Publication No. (NIH) 74-615, pp. 297-314.



1. CARCINOMA OF CERVIX DEATHS PER 100,000 WHITE FEMALES - BY ARKANSAS COUNTY AND BY SURROUNDING STATES FOR 1950-1969.

ARKANSAS PUBLIC HEALTH AT A GLANCE

cervix by counties are presented in map form.

Mason and McKay determined the usual residence as that on the death certificate.* Populations at risk were derived from the 1950, 1960 and 1970 census data.

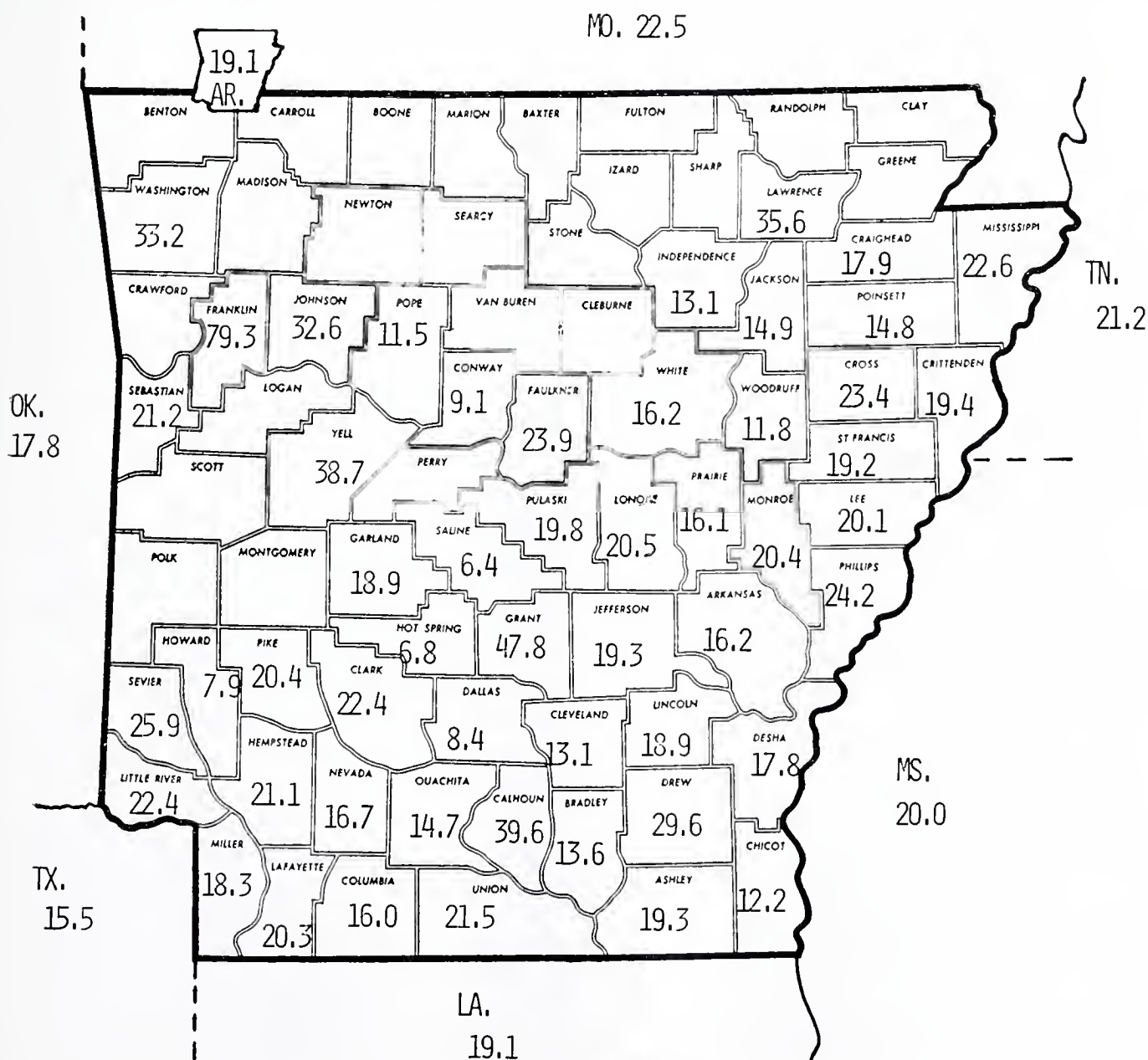
The maps show the average annual age-adjusted mortality rates per 100,000 for white and for non-white women by county. Population distribution most likely accounts for no recorded non-white deaths in 23 counties and for the high non-white rates in Franklin, Grant, Yell, Lawrence and Johnson counties where no more than 2 non-white deaths per county occurred in the 20 year period. While the 1970 census showed Arkansas white females outnumbered non-white by 4:1, ratios for the named 5 counties are 44:1 and for the 23 counties 146:1. Prior census data shows a similar predominance of white residents in these counties.

For the State as whole, mortality from cancer

of the uterine cervix is greater for non-white women, 19.1 per 100,000, than for white women, 8.9 per 100,000, as is true for the United States as a whole, 18.9 and 7.8 per 100,000 respectively.

In comparison with its contiguous states, Arkansas is in a median position for non-white deaths, but second only to Tennessee for white mortality. Among the continental United States and the District of Columbia, Arkansas ranks 13th for white and 23rd for non-white deaths from cancer of the cervix.

The continued extensive efforts of practicing physicians, the State and local health departments, the Arkansas Medical Society, the Arkansas Cancer Society, Inc. and its Uterine Cancer Task Force, the Cooperative Extension Service, and other groups to make educational programs and early diagnosis available for all Arkansas women at risk will help to reduce unnecessary deaths from carcinoma of the cervix.



2. CARCINOMA OF CERVIX DEATHS PER 100,000 NON-WHITE FEMALES - BY ARKANSAS COUNTY AND BY SURROUNDING STATES FOR 1950-1969.



EDITORIAL

Medicine—1975

Alfred Kahn, Jr., M.D.

Three quarters of the way through the twentieth century finds the U. S. A. confronted with some monumental problems which affect American Medicine. At the outset, it should be pointed out that organized medicine does not set the patterns of our civilization. It has to operate in the climate of our civilization—our mores, our private enterprise system, the state of our economy, the political leanings of our Congress, etc. For example, organized medicine did not cause the economic “stagflation,” but it has to live with it. Organized medicine did not initiate the many headaches and heartaches produced by the Vietnamese War, but it has had to function in a society sorely afflicted by the aftermath of this catastrophe. In short, organized medicine has had to adapt to the dynamic changes occurring in our world—it is not the molder.

In this frame of reference, however, there are areas where organized medicine can promote certain initiatives for the benefit of our country. One of the greatest current needs is for a system of care for the chronically ill. A chronic illness can literally bankrupt a family. It is not enough to try and combat this by performing research on diseases that we will eventually conquer. The gut issue is a *now* plan for assistance to the victims of cancer, crippling arthritis, devastating accidents, and other disorders which not alone prevent an individual from performing remunerative works but which also obligates the victim for expensive treatments. There are some options in the manner in which this could be handled. The best method would be to have private companies sell this insurance to every citizen. The government could insure through private insurance carriers; a government insurance corporation could be set up; a hospital

system like the Veterans Administration could be set up and run in conjunction with the Veteran's Administration. Certainly, the aim should be to give the chronic patient excellent care within an attainable, fiscally responsible system that does not conflict with private practice.

Another area of concern is the maldistribution of medical care. Physicians tend to cluster in cities near hospitals, admittedly with our modern highways, helicopters, ambulances and good communication systems. The need for a physician in every hamlet is unnecessary and probably not economically feasible—a horse and buggy doctor had a hard time seeing patients over ten to fifteen miles from his office. With good highways, a physician's range can be much farther. This leads into the question if a community does not have a physician what are its options? A good transportation to the nearest medical facility is a prime requisite; this is being developed. Of a somewhat more controversial nature is the matter of non-physician medical care. This latter has much to recommend it. There is a real need for emergency care in all small communities without physicians. There is also a need for trained personnel to treat minor illnesses and to perform follow-up care of patients recovering from serious illnesses and surgery.

On two occasions in the recent past, a major Arkansas newspaper has commented on the malpractice suit problem. The problem is not just Arkansas; it is nationwide and perhaps less widespread here than elsewhere. In all candor, it cannot be said that the increase in these suits is the result of a poorer quality and style of practice than in former years. The cause of the

increase in these suits originates in some causes outside the profession. First, the consumer movement has resulted in many suits in diverse areas far removed from medicine. Secondly, the movement toward socialism in government creates a climate of public opinion which puts private enterprise, including medicine, in an unfavorable light. Thirdly, publicity concerning these suits has had a stimulating effect in the production of more suits. One of the biggest causes of malpractice suits is the fact that physicians are affluent; when physicians were less prosperous, there was not much point in suing them—nothing much could be recovered even if the suit were won; their relative prosperity makes them a tempting target. Lastly, revered people are seldom assailed as individuals or in groups; it is apparent that the public does not hold physicians in high enough esteem to accept the fact that different competent physicians may have express differing opinions about a case—and even the

most competent physicians have treatment failures.

The matter of controlling physician's fees is still being debated by some legislative and quasi legislative groups. The laws of supply and demand and the relative state of the economy are by far the best way to control physician's fees. To artificially set fees might artificially keep them higher than normal in a declining economy. The further intrusion of "big brother" into another walk of life adds another chore and hardship to a busy physician. Physician's fees reflect the economy; they are not pacemakers in moving the economy up or down. Fixed fee systems are fought with all the unpleasant overtones found in wage and price control in any other sector of our lives.

Physicians as a group are forced to make public issues of some of those problem areas even though their time would be better spent practicing medicine.



MEDICINE IN THE



GONORRHEA

CDC Recommended Treatment Schedules, 1974

Note: Physicians are cautioned to use no less than the recommended dosages of antibiotics.

UNCOMPLICATED GONOCOCCAL INFECTIONS IN MEN AND WOMEN

Drug Regimen of Choice

Aqueous procaine penicillin G (APPG) 4.8 million units intramuscularly divided into at least 2 doses and injected at different sites at one visit, together with 1 gm of probenecid by mouth just before injections.

Alternative Regimens

A. Patients in whom oral therapy is preferred:
Ampicillin 3.5 gm by mouth, together with 1 gm probenecid by mouth administered at the same time. There is evidence

that this regimen may be slightly less effective than the recommended APPG regimen.

B. Patients who are allergic to the penicillins or probenecid (i.e. allergy to penicillin, ampicillin, probenecid, or previous anaphylactic reaction):

1. Tetracycline hydrochloride, 1.5 gm initially by mouth, followed by 0.5 gm by mouth 4 times per day for 4 days (total dosage 9.5 gm). Other tetracyclines are not more effective than tetracycline hydrochloride. All tetracyclines are ineffective as single-dose therapy.
2. Spectinomycin hydrochloride, 2 gm intramuscularly in 1 injection.

Treatment of Sexual Partners

Men and women with known recent exposure to gonorrhea should receive the same treatment as those known to have gonorrhea. Male sex partners of persons with gonorrhea must be examined and treated because of the high prevalence of nonsymptomatic urethral gonococcal infection in such men.

Follow-up

Follow-up urethral and other appropriate cultures should be obtained from men, and cervical, anal, and other appropriate cultures should be obtained from women, 7 to 14 days after completion of treatment.

Treatment Failures

Most recurrent infection after treatment with the recommended schedules is due to reinfection. True treatment failure after therapy with penicillin, ampicillin, or tetracycline should be treated with 2 gm of spectinomycin intramuscularly.

Postgonococcal Urethritis

Tetracycline 0.5 gm 4 times a day by mouth, for at least 7 days.

Pharyngeal Infection

Pharyngeal gonococcal infections may be more difficult to treat than anogenital gonorrhea. Posttreatment cultures are essential follow-up for pharyngeal infection. The schedules of ampicillin and spectinomycin recommended for anogenital gonorrhea are ineffective in pharyngeal gonorrhea. Patients whose infection is not eradicated after treatment with 4.8 million units of APPG plus 1 gm of probenecid may be treated with 9.5 gm of tetracycline in the dosage schedule outlined above (Alternative Regimens).

Syphilis

All patients with gonorrhea should have a serologic test for syphilis at the time of diagnosis. Seronegative patients without clinical signs of syphilis who are receiving the recommended parenteral penicillin schedule need not have follow-up serologic tests for syphilis. Patients treated with ampicillin, spectinomycin, or tetracycline should have a follow-up serologic test after 3 months to detect inadequately treated syphilis.

Patients with gonorrhea who also have syphilis should be given additional treatment appropriate to the stage of syphilis.

Not Recommended

Although long-acting forms of penicillin (such

as benzathine penicillin G) are effective in syphilotherapy, they have *NO* place in the treatment of gonorrhea. Oral penicillin preparations, such as penicillin V are not recommended for the treatment of gonococcal infection.

TREATMENT OF UNCOMPLICATED GONORRHEA IN PREGNANT PATIENTS

- A. For women who are not allergic to penicillin:
Use the regimen of APPG plus probenecid or use ampicillin plus probenecid as defined above.
- B. For pregnant patients who are allergic to penicillins (Note: there are several possible alternative regimens, each of which has potential disadvantages):
 1. Erythromycin, 1.5 gm orally, followed by 0.5 gm 4 times a day for 4 days for a total of 9.5 gm. This regimen is safe for mother and fetus, but its efficacy has not been established. Erythromycin estolate should not be used in patients with underlying liver disease.
 2. Cefazolin, 2 gm intramuscularly, with 1 gm of probenecid. Because of the possibility of cross-allergenicity between penicillins and cephalosporins, this regimen should not be used in patients with a history of penicillin anaphylaxis.
 3. Spectinomycin, 2 gm intramuscularly, is an effective dose, but safety for the fetus has not been established.

Contraindicated

Tetracycline should not be used for uncomplicated gonococcal infection in pregnant women because of potential toxic effects for mother and fetus.

ACUTE SALPINGITIS (PELVIC INFLAMMATORY DISEASE)

The diagnosis of acute salpingitis should be considered in women with acute lower abdominal pain and adnexal tenderness on pelvic examination. Since there are no completely reliable clinical criteria on which to distinguish gonococcal from nongonococcal salpingitis, endocervical cultures for *Neisseria gonorrhoeae* are essential in such patients. Therapy, however, should be initiated immediately, without waiting for the results of the cultures.

- A. *Hospitalization.* It should be strongly considered for women with suspected salpingitis in these situations:
 1. Uncertain diagnosis, where surgical emer-

gencies must be excluded

2. Suspicion of pelvic abscess
3. Pregnant patients with salpingitis
4. Inability of the patient to follow an outpatient regimen of oral medication, especially because of nausea and vomiting
5. Failure to respond to outpatient therapy

B. *Antimicrobial Agents.* Controlled studies of the treatment of acute salpingitis are not available. Initial management must *AT LEAST* be adequate for gonococcal salpingitis. These regimens are known to be adequate for the treatment of gonococcal salpingitis:

1. Outpatients
 - a. 1.5 gm tetracycline hydrochloride given as a single oral loading dose, followed by 500 mg taken orally 4 times a day for 10 days.
 - b. APPG 4.8 million units intramuscularly, divided into at least 2 doses and injected at different sites at one visit *OR* 3.5 gm of oral ampicillin. One gm of oral probenecid is given along with either penicillin or ampicillin, and both are followed by 500 mg of ampicillin taken orally 4 times a day for 10 days.
2. Hospitalized patients
 - a. Aqueous crystalline penicillin G 20 million units given intravenously each day until *clear-cut* improvement occurs, followed by 500 mg of ampicillin taken orally 4 times a day to complete 10 days of therapy. The need for additional or alternative antibiotics for the treatment of nongonococcal salpingitis requires further study. Since it is impossible to distinguish gonococcal from nongonococcal salpingitis clinically, many physicians also use an aminoglycoside in addition to penicillin and/or antibiotics which are effective against *Bacteroides fragilis* as initial therapy.
 - b. Tetracycline hydrochloride 500 mg, given intravenously 4 times a day until improvement occurs, followed by 500 mg taken orally 4 times a day to complete 10 days of therapy. This regimen should not be used for pregnant women or for patients with renal failure.
3. Failure to improve on the recommended

regimens does not necessarily indicate the need for stepwise additional antibiotics, but requires reassessment of the possibility of other diagnoses and of the specific microbial etiology.

- C. The effect of the removal of an intrauterine device on the response of acute salpingitis to antimicrobial therapy and on the risk of recurrent salpingitis requires further study.
- D. *Adequate treatment of women with acute gonococcal salpingitis must include examination and appropriate treatment of their male sex partners because of the high prevalence of nontyphoidal urethral gonococcal infection in such men. Failure to treat male sex partners is a major cause of recurrent gonococcal salpingitis.*
- E. Follow-up of patients with acute salpingitis is essential. All patients should receive repeat pelvic examinations and cultures for *N. gonorrhoeae* after treatment.

DISSEMINATED GONOCOCCAL INFECTION

- A. Equally effective treatment schedules in the arthritis-dermatitis syndrome include:
 1. Aqueous crystalline penicillin G, 10 million units intravenously per day for 3 days or until there is significant clinical improvement. This may be followed with ampicillin, 500 mg 4 times a day orally to complete 7 days of antibiotic treatment.
 2. Ampicillin, 3.5 gm orally, plus probenecid 1 gm, followed by ampicillin, 500 mg 4 times a day orally for at least 7 days.
- B. In penicillin- and/or probenecid-allergic patients:
 1. Tetracycline 1.5 gm orally followed by 500 mg 4 times a day orally for at least 7 days. Tetracycline should not be used for complicated gonococcal infection in pregnant women because of potential toxic effects for mother and fetus.
 2. Erythromycin 0.5 gm intravenously every 6 hours for at least 3 days.
- C. Additional measures
 1. Hospitalization is indicated in patients who are unreliable, have uncertain diagnosis, or have purulent joint effusions or other complications.
 2. Immobilization of the affected joint(s) appears helpful. Repeated aspirations and saline irrigations appear beneficial, but controlled studies of these procedures have

Doctor

Shouldn't You

Contribute To

M. E. F. F. A.?

- Your Contribution Is Tax Deductible
- You May Earmark Funds
- You May Contribute Cash, Books, Life Insurance, Land Instruments, Stamp and Coin Collections, Works of Art, Securities, etc.

When You Contribute You Help Achieve the Objectives of the Foundation Which Are Set Forth in The Charter Under the Purposes:

1. To engage in and carry out scientific research, charitable, educational and scientific activities and projects.
2. Assist medical students in the pursuit of their education.
3. To administer governmental programs and grants.
4. To accept and hold as assets of the corporation in trust or otherwise consistent with its other charitable purposes.

One Way You Can Support Your Foundation Is by Completing the Bequest Form Below and Mailing to:

ARKANSAS MEDICAL SOCIETY

P. O. Box 1208

Fort Smith, Arkansas 72901

M. E. F. F. A.

Form of Bequest

I give and bequeath to the Medical Education Foundation for Arkansas, the sum of _____ dollars (\$ _____) to be used by the Board of Trustees of the Foundation for _____

(state purpose of gift if restricted)

Signed _____

IMPORTANT INFORMATION: This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those after meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria and paralytic ileus.

Dosage and administration: Lomotil is contraindicated in children less than 2 years old. Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. Use a narcotic antagonist in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of 1/2 ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

SEARLE

Searle & Co.
San Juan, Puerto Rico 00936

Address medical inquiries to:
G. D. Searle & Co.
Medical Department, Box 5110,
Chicago, Illinois 60680

454 R

When diarrhea has his number...



Lomotil puts him back in the game.

Physicians and patients both want prompt control of the symptoms of diarrhea. A rapid, uncontrolled loss of fluids and electrolytes can cause a medical crisis, particularly in children, and in patients who are seriously ill, or in people who are badly undernourished.

Lomotil usually stops diarrhea promptly. This rapid action halts the emergency aspect of diarrhea

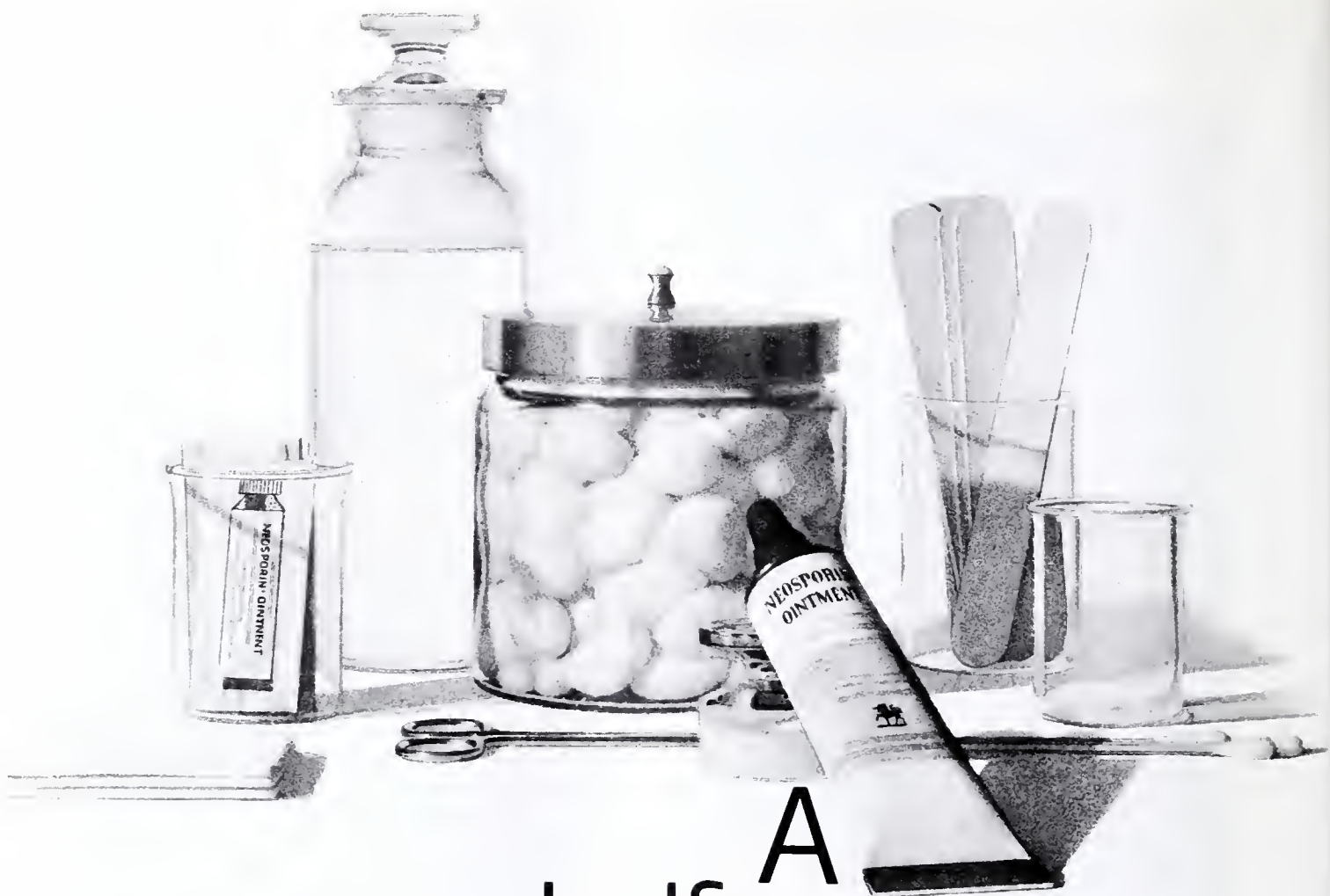
and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate antibiotic therapy should be given along with Lomotil.

Lomotil has few side effects, and those that do occur are generally mild.

Lomotil[®]
TABLETS/LIQUID

Each tablet and each 5 ml. of liquid contain:
diphenoxylate hydrochloride 2.5 mg.
(Warning: May be habit forming)
atropine sulfate 0.025 mg.

Usually stops diarrhea promptly.



A half-ounce of prevention

Use it to prevent a topical infection. Or to treat one that's already started. In either case, it's good medicine. Whether for lacerations, burns, open wounds, IV catheter or surgical aftercare. Neosporin® Ointment provides broad antibacterial coverage against common susceptible pathogens. And since it contains three antibiotics that are rarely used systemically, the risk of sensitization is reduced. Neosporin Ointment. A half-ounce of prevention. Also available in a full ounce of prevention and in convenient foil packets.

Neosporin Ointment carried on Apollo and Skylab missions.

Neosporin® Ointment (polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs.
In tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where

absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PH



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Before prescribing, see complete prescribing information in SK&F literature or PDR. The following is a brief summary.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities.

Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Anti-hypertensive effects may be enhanced in post-sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

KEEP THE HYPERTENSIVE PATIENT ON THERAPY KEEP THERAPY SIMPLE WITH **DYAZIDE**[®]

Each capsule contains 50 mg. of Dyrenium[®] (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Trademark

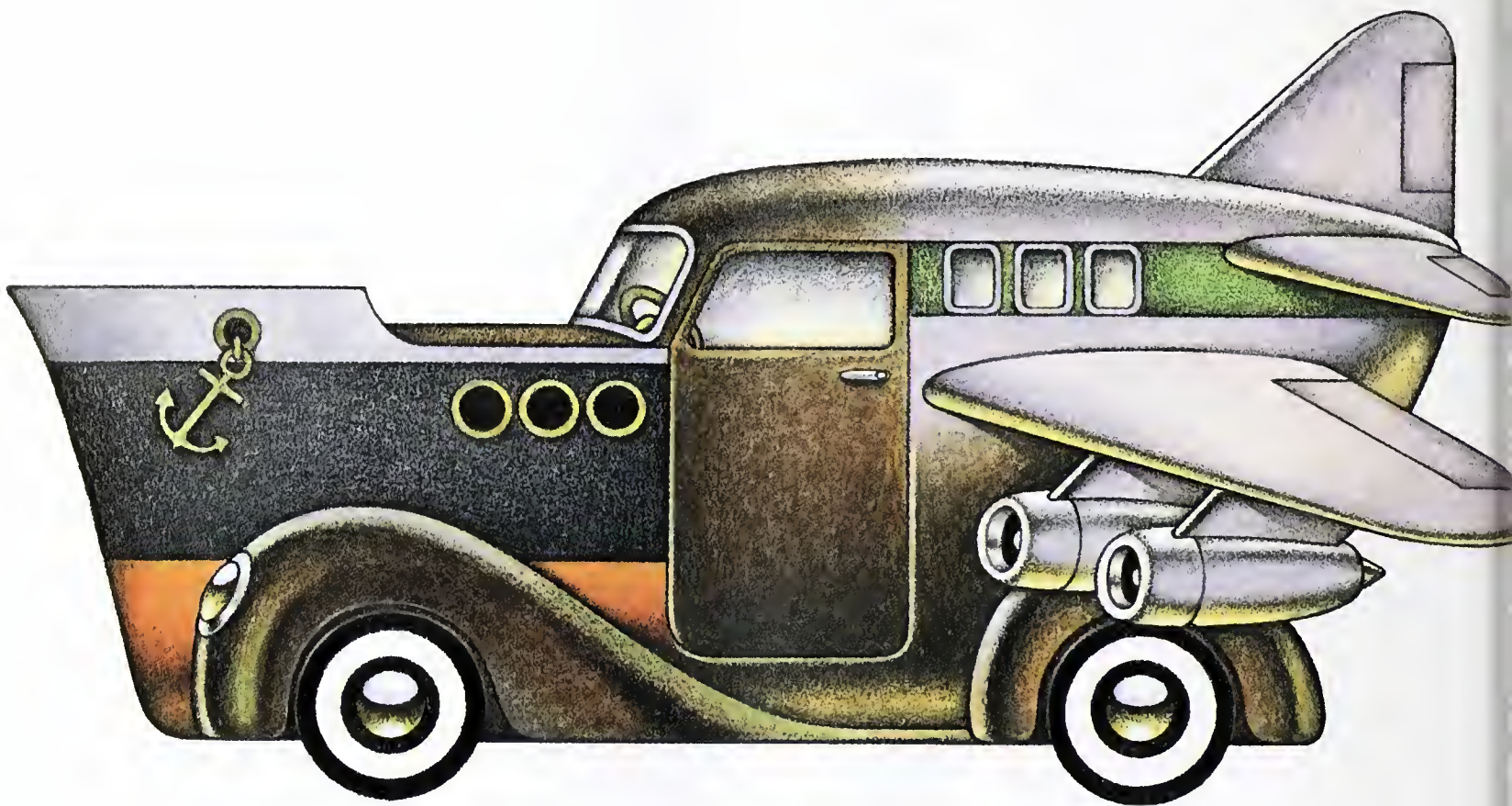
Neither inconvenient potassium supplements nor special K⁺ rich diets needed as a rule.
Just 'Dyazide' once or twice daily for maintenance.



Two prime reasons patients drop out of hypertensive therapy are (1) the patient failed to understand directions, and (2) the regimen was overly complicated. Dosage is simple with 'Dyazide', easily understood, once or twice daily, depending on response. There's no need to complicate the regimen with potassium supplements or unwieldy potassium-rich diets.

TO KEEP BLOOD PRESSURE DOWN AND KEEP POTASSIUM LEVELS UP

SK&F CO.
Carolina, P.R. 00630
Subsidiary of
SmithKline Corporation



On land, sea, and in the air...

Up to 24 hours of effective control with a single dose...in nausea, vomiting and dizziness associated with motion sickness.

Dosage: 25 to 50 mg. 1 hour before travel.

Available on prescription only.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did

not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG *Pfizer*
 A Division of Pfizer Pharmaceuticals
 New York, New York 10017

Antivert®/25 Chewable Tablets
(meclizine HCl) 25 mg.
for motion sickness

not been performed. Open drainage of joints other than the hip is now generally discouraged in patients with gonococcal arthritis.

3. Intra-articular injection of penicillin is unnecessary, since penicillin levels in the synovial fluid of inflamed joints approximate serum levels; furthermore, intra-articular injection per se may produce a toxic synovitis.

D. Meningitis and endocarditis due to the gonococcus require high-dose intravenous penicillin therapy (at least 10 million units per day) for longer periods: usually at least 10 days for meningitis and 3-4 weeks for endocarditis.

GONOCOCCAL INFECTION IN PEDIATRIC PATIENTS

Pediatric patients encompass those from birth to adolescence. When a child is postpubertal and/or over 100 pounds, he or she should be treated with dosage regimens as defined above for adults.

The efficacy of therapeutic regimens for uncomplicated and complicated gonococcal infections of childhood is unproven at present.

With gonococcal infection in children, the possibility of child abuse must be considered.

Prevention of Neonatal Infection

All pregnant women should have endocervical cultures examined for gonococci as an integral part of prenatal care.

Prevention of Gonococcal Ophthalmia

- A. One percent silver nitrate (do not irrigate with saline, as this may reduce efficacy).
- B. Ophthalmic ointments containing tetracycline, erythromycin, or neomycin are also probably effective.
- C. *Not Recommended:* Bacitracin ointment (not effective) and penicillin drops (sensitizing).

Management of Infants Born to Mothers With Gonococcal Infection

Orogastric and rectal cultures should be taken from all patients. Blood cultures should be taken if septicemia is suspected. Aqueous crystalline penicillin G, 50,000 units/kg/day should be administered in 2 daily doses intravenously if cultures or Gram-stained smears reveal gonococci. The duration of therapy should be determined by clinical response. In suspected septicemia, an aminoglycoside should also be given.

Neonatal Disease

- A. Gonococcal ophthalmia: Patient should be hospitalized. Antimicrobial agents: Aqueous crystalline penicillin G 50,000 units/kg/day in 2 or 3 doses intravenously for 7 days *PLUS* frequent saline irrigations and instillation of penicillin, tetracycline, or chloramphenicol eyedrops.
- B. Complicated infection: Arthritis and septicemia should be treated by hospitalization and administration of aqueous crystalline penicillin G 75,000-100,000 units/kg/day in 4 doses or procaine penicillin G 75,000-100,000 units/kg/day in 2 doses for 7 days. Meningitis should be treated with aqueous crystalline penicillin G 100,000 units/kg/day, divided into 2 or 3 intravenous doses a day and continued for at least 10 days.

Childhood Disease

Gonococcal ophthalmia should be treated with hospitalization and by the administration of aqueous crystalline penicillin G intravenously 75,000-100,000 units/kg/day in 4 doses or procaine penicillin G intramuscularly 75,000-100,000 units/kg/day in 2 doses for 7 days *PLUS* saline irrigations and instillation of penicillin, tetracycline, or chloramphenicol eyedrops. Topical antibiotics *alone* are *NOT* recommended in therapy of gonococcal ophthalmitis. The source of the infection must be identified.

Uncomplicated vulvovaginitis and urethritis usually do not require hospitalization. Both may be treated at one visit with APPG 75,000-100,000 units/kg intramuscularly and probenecid 25 mg/kg by mouth. Topical and systemic estrogen therapy are of no benefit in vulvovaginitis. All patients should have follow-up cultures, and the source of infection should be identified, examined, and treated.

Infection complicated by peritonitis or arthritis should be treated by hospitalization and administration of aqueous crystalline penicillin G intravenously 75,000-100,000 units/kg/day in 4 doses or procaine penicillin G 75,000-100,000 units/kg/day intramuscularly in 2 doses for 7 days.

Treatment of patients with allergy to penicillin: Patients under 6 years of age should be treated with erythromycin 40 mg/kg/day in 4 doses by mouth for 7 days for uncomplicated disease. Complicated disease should be treated

with cephalothin 60-80 mg/kg/day in 4 doses intravenously for 7 days. Patients older than 6 may be treated with an oral regimen of tetracycline 25 mg/kg as an initial dose followed by 40-60 mg/kg/day in 4 doses for 7 days or an intravenous regimen of tetracycline 15-20 mg/kg/day in 4 doses for 7 days.

THE MONTH IN WASHINGTON

The 93rd Congress concluded its two-year session that was highlighted by the historic Watergate affair.

Congress held hearings but took no action on a National Health Insurance (NHI) program. However, the lawmakers approved during the last days a health planning bill anticipating NHI. Earlier, they voted for a liberalization of the Keogh plan allowing self-employed people to set aside much higher amounts for their retirement subject to tax deferral. Aid for medical education legislation foundered and will be revived this year.

The Democratic victories in the November elections, the Democratic push for legislative reforms within Congress, and the downfall of Rep. Wilbur Mills (D., Ark.) as Chairman of the House Ways and Means Committee signalled a more liberal and activist Congress in 1975.

The House Democratic Caucus voted to pack Ways and Means, which has the prime jurisdiction over NHI, with liberal Democrats and enlarge its membership to 37, compared to 25 last year. The ratio in 1975 is 25 Democrats, 12 Republicans. Rep. Al Ullman (D., Ore.) is the new Chairman. For the first time, Ways and Means will be broken into subcommittees. The Subcommittee on Health is headed by Rep. Dan Rostenkowski (D., Ill.).

The Caucus stripped Committee Democrats of their long-held power to appoint all House Democrats to committee slots, a move that weakened Ways and Means.

* * * * *

On the final day of the session in December, the last Congress approved legislation giving health planning agencies strong new authority over hospital services and construction. The lawmakers failed to reach agreement on health manpower bills that would have required many young physicians to serve in shortage areas and dictated apportionment of specialization education at medical schools.

Both measures had stirred controversy and generated opposition among health groups. The planning bill's most disputed original provisions would have paved the way for public utility-type regulation of physicians' services as well as those of institutions. These were dropped from the final version sent to the White House.

The health manpower bill had been toned down from the one first backed by Sen. Edward Kennedy (D., Mass.) and approved by the Senate Labor and Public Welfare Committee. A more moderate substitute was adopted on the Senate floor minus such items as relicensing of physicians. However, medical schools and medical provider organizations, including the American Medical Association, had contended the scaled-down bill was still too harsh in its effect on young physicians and medical schools. This opposition plus Sen. Kennedy's decision to block action this year killed the health manpower legislation. Meantime, existing programs will continue as in the past.

The planning bill, approved by a 236-79 House vote a few weeks previously, was swiftly adopted by a House-Senate conference which ironed out differences in the bills approved by the two chambers. The compromise was adopted by the House and Senate only hours before the 93rd Congress quit.

Conceived as a preparatory measure to gear for a national health insurance program, the planning bill sets up an elaborate system of federal standards and regulations covering state and local health planning agencies and endowing them with strong power to force institutions to abide by planning decisions on services. All new hospital building and expansion would be subject to rigid controls.

The aim is to avoid waste and duplication, provide efficiency, raise quality and availability, and relieve shortage areas. The incentive for the states is federal aid. The ultimate impact of the bill will be increased control from the state and federal level on institutional health care.

Writing the regulations to carry out the program will take a long time as will the ensuing administrative work of putting the planning scheme into operation. The bill provides for the establishment of local and state agencies for the development of comprehensive health plans under national guidelines developed by

the Secretary of Health, Education and Welfare. Health systems agencies would be set up throughout the United States. The bill requires that all states enact certificate of need legislation; it expands existing review authority to include authority to review existing facilities and services as well as proposed facilities. The measure authorizes federal assistance to no more than six states which have rate setting legislation or are planning such legislation in the near future. This demonstration federal assistance would be given to designated state health planning and development agencies for the regulation or establishment of rates for the payment or reimbursement of those engaged in the delivery of health services.

Under the bill, a National Council on Health Planning and Development will make recommendations on national guidelines and implementation and evaluate "the implications of new medical technology for the organization, delivery, and equitable distribution of health care services." Health services areas would be established throughout the United States.

A health systems agency for a health service area will be a non-profit private corporation (or similar legal mechanism such as a public regional planning body if it has a governing board composed of a majority of elected officials of units of general local government if the area of the jurisdiction of that unit is identical to the health service area.

State health planning and development agencies would conduct the health planning activities of the state and implement those parts of the state health plan and the plans of the health systems agencies within the state which relate to the government of the state.

A state health planning and development agency shall be advised by a statewide health coordinating council.

* * * * *

Strict utilization review procedures for Medicare and Medicaid were ordered by the HEW Department.

The final regulations tighten and standardize hospital and skilled nursing home admission and stay rules for federal program beneficiaries. They are designed to be applicable to all patients and to fit in with any future NHI program.

"Health care is an expensive and scarce resource," commented HEW Secretary Caspar

Weinberger. "We must learn now to make the most efficient use of it before National Health Insurance places additional demands on the system."

The regulations are expected to have a great impact on all hospital and nursing home review operations.

The HEW Department said they are compatible with and supportive of HEW's Professional Standards Review Organization (PSRO) program, and will permit an orderly transition to the operation of the PSRO's. While the nationwide PSRO program is one to two years away from full scale operation, review under these new regulations can begin now in all facilities serving eligible individuals. The regulations implement provisions of the Social Security Amendments law approved by Congress in 1972.

A controversial feature of the earlier proposed regulations was to require pre-admission certification. This drew a flood of protests—8,000 adverse comments of 8,300 responses overall—and was dropped from the final regulations:

The new requirements and the major changes in the final regulations which modify conditions of participation by hospitals and skilled nursing facilities in Medicaid and Medicare programs are:

*Hospitals will be required to undertake concurrent admission review, rather than prior approval as first proposed. Approved length of stay will be based on patients' condition and diagnosis and will be subject to extension, if medically justified.

*Timely review of a patient's need for continued hospitalization according to criteria developed by the review committee, and retrospective review of the quality of care through medical care evaluation studies.

*Composition of the utilization review committee has been changed to permit professional personnel employed by hospitals to be members.

In addition, under Medicaid, states will be required to establish utilization control programs which include provisions for (1) physicians' certification at admission and every 60 days thereafter of a patient's need for institutional care; (2) development and review of a plan of care for each patient; and (3) on-site inspections to determine adequacy and quality of services.

Here's how HEW described hospital admission review rules for Medicare and Medicaid:

- *All patients admitted under Medicare or Medicaid are reviewed.
- *Review within one working day of admission and final determination made within two working days.
- *Review using criteria and standards developed by the utilization review committee.
- *Appropriate regional norms are used, where available, to assist in assigning a date for extended stay review.
- *Selected diagnosis/problems, practitioners; or institutions which present problems are reviewed in greater depth.

For hospital stay review, all patients still in the hospital on the date assigned at admission will be reviewed. They will be reviewed prior to or on date assigned at admission. A final determination is made within two working days of the end of the certified period. The review employs criteria and standards developed by the utilization review committee.

Purpose of required medical care evaluation studies "is to improve the quality of medical care and the efficiency of health care delivery," HEW said. The studies will be retrospective with in-depth reviews of known or suspected problem areas in medical care.

The studies should identify specific needed changes, and lead to appropriate action programs to make such changes—i.e., programs of continuing education.

Each institution must have at least one study in progress at any point in time and must complete at least one study annually, HEW said.

* * * * *

Charles Edwards, M.D., resigned as Assistant Secretary for Health at the HEW Department. He will become Senior Vice President of Becton, Dickenson and Company, Manufacturer of medical and surgical equipment in Rutherford, N. J.

Dr. Edwards, 51, served five years at HEW, starting off in 1969 as Commissioner of the Food and Drug Administration. Previously, he was an Executive with the Management consultant firm, Booze, Allen, and Hamilton, and Director of the Division of Socio-economic Activities of the American Medical Association.

* * * * *

President Ford vetoed the \$1.8 billion health revenue sharing and health services bill which

provided authorizations for Community Mental Health Centers, Migrant workers, and Neighborhood Health Centers. These programs will be funded on an interim basis until Congress takes another crack this year. The Administration had opposed many provisions, and the veto was no surprise. President Ford said the bill called for three times as much spending as the Administration wanted.

The bill provided \$320 million for health revenue sharing programs in 1975-76.

Community health centers were authorized \$258 million for the two years.

Migrant health centers would have been authorized \$105 million for grants to establish and operate in high-impact areas. Family planning services were authorized \$334 million for project and training grants and contracts.

Home health services would have received \$15 million.

* * * * *

The Supreme Court refused to block a lower court requirement that drug manufacturers warn parents during community-wide vaccination drives that vaccine might be harmful.

The American Medical Association, pediatricians and epidemiologists had warned that parents' fears could hamper inoculation campaigns.

Manufacturers are required by the Federal Government to include warning pamphlets in drug shipments to pharmacists. There is no requirement to warn the patient.

The Supreme Court appeal was brought by Wyeth Laboratories, which manufactures a Sabin oral vaccine. The vaccine was used during a 1970 drive to combat a polio epidemic in Hidalgo County, Tex.

* * * * *

The American Medical Association urged the Administration to explore with it the feasibility of legislation dealing with the malpractice liability of physicians in treating beneficiaries of federal programs.

In a message delivered to HEW Secretary Caspar Weinberger by AMA President Malcolm C. Todd, M.D., and Richard Palmer, M.D., Chairman of the AMA Board of Trustees, the Association declared that "what is needed is a swift system for paying deserving claims so that justice can be prompt. For both the physician accused of malpractice, who bears a severe emo-

tional burden, and the patient who becomes an unfortunate plaintiff, justice delayed is justice denied."

The letter by Dr. Todd noted that in 1975 as much as 50 percent of the cost of health care may be provided through government-sponsored plans and programs.

Dr. Todd said at present it is estimated that after all costs of the tort system are met—fees to defense and plaintiff's attorneys—and witnesses, costs of investigation, insurance underwriting, etc., plaintiffs actually receive a net of only \$1.00 out of every \$6.00 paid in premiums for hospital and physician's liability insurance.

He pointed out that government health care programs now contribute a major part of the cost of a system which provides claimants with only 16 cents out of every dollar paid for malpractice insurance. The remainder goes for the services of plaintiffs and defense lawyers, investigators, witnesses, insurance carriers and brokers, and miscellaneous items of overhead, Dr. Todd noted.

"Any payments or awards made to claimants arising out of medical accidents should exclude medical costs which, in fact, were actually paid for by Medicare, Medicaid, etc. Under existing law, a successful malpractice claimant can recover for medical and hospital costs that have been paid or that will be paid in the future by Medicare, Medicaid. Such windfall payments which the government pays for directly or indirectly should cease," said Dr. Todd in the letter.

He urged "a conference at the earliest mutually convenient time between representatives of the AMA and HEW to discuss the feasibility of federal legislation which would deal with the concepts discussed."

"Disabled Physician" Legislation

The American Medical Association will hold a national conference on the "Disabled Physician" in San Francisco, April 11-12, 1975. The major theme for the conference will be alcoholism, drug dependence, and mental disorders existing in the physician population.

Participants will examine the motivational aspects, as well as appropriate mechanisms, for encouraging doctors with these disabilities to seek advice and treatment. Accountability to the public through the assurance of competent pa-

tient care will be accented. Speakers and attendees will focus on exploring alternative formal and informal procedures for the effective treatment, rehabilitation and disciplinary action, when necessary, of the disabled physician.

A discussion session will be devoted to the practical ways of implementing AMA's model legislation, the "Disabled Physicians Act", which takes the form of a uniform state law. Preventive rather than punitive in nature, this draft bill would establish the state medical society as an agent to the state licensing body in this particular problem area.

Where voluntary compliance is not effective, the model legislation provides for restriction, suspension, or revocation of a practitioner's license for reasons arising out of physical or mental illness, including drug dependence and alcoholism.

MINUTES

BOARD OF DIRECTORS

ARKANSAS FOUNDATION FOR MEDICAL CARE

The Board of Directors of the Arkansas Foundation for Medical Care met on February 2, 1975, in the Camelot Inn, Little Rock. Officers and Board members present were: Chairman Long, Vice Chairman Orr, Secretary Shuffield, Treasurer Duzan, Board Members Kirkley, Gray, Pat Bell, Irwin, Burge, Jameson, Kemp, Harris, Clark, Orr, Kolb, Kirby, Henry, Koenig. Others present included L. A. Whittaker, Mr. Warren, Mr. Schaefer, and Miss Richmond.

The Board transacted business as follows:

1. Chairman Long reviewed for the Board the status of the Foundation's planning contract for PSRO.
2. Chairman Long advised the Board that HEW will require changes in the Articles of Incorporation of the Foundation. The Board approved proposed changes in the Articles of Incorporation to accomplish the following:
 - A. To indicate that the PSRO review function is the primary purpose of the Foundation;
 - B. To indicate that the Foundation does not want to merchandise any type of insurance or health delivery plan.

Mr. Warren was requested to draft the

necessary legal documents to get the amendments to the Articles of Incorporation filed with the appropriate State officials.

3. Chairman Long presented a proposal for a revised By-Laws of the Foundation which would comply with HEW requirements for an organization functioning as a professional standards review organization. He outlined for the Board the principal areas of change:

- A. To specifically state that the primary function of the Foundation will be the professional standards review (PSRO).
- B. To remove discretionary authority of the Board in approving or denying membership—making eligibility determined by license to practice in the area.
- C. Providing for a nominating committee and written ballot for election of Board, with no geographical slotting, and maxi-

mum tenure of 6 years for Board members.

- D. Establishing one tenth of membership as quorum for conducting business at general membership meeting, with proxy voting prohibited.

- E. To make membership for indefinite period—membership retained as long as physician meets qualifications.

Upon the motion of Kemp, the By-Laws were approved as presented.

4. Chairman Long advised the Board there was a possibility of some Foundation funding through the Regional Medical Program. Upon the motion of Kemp, the Executive Committee of the Board was authorized to accept or reject such money from RMP should it in fact be available.

APPROVED: C. C. Long, M.D.

Chairman, Board of Directors



PERSONAL AND NEWS ITEMS

Dr. John W. Morris — 100 and Still Practicing

Dr. John W. Morris of McCrory celebrated his 100th birthday on February 6th. Dr. Morris began his practice in 1900 and is still seeing patients five days a week. The NBC morning news show "Today" recently featured Dr. Morris in a segment on its program.

Dr. Ramsay Nominated

Dr. Rex C. Ramsay, Jr., Acting Director of the State Health Department, received a recommendation from the State Board of Health to be named director of the department. The Board's recommendation now rests with Governor David Pryor, who will select the new director.

Dr. Kramer Named Chief of Staff

Dr. Ralph G. Kramer of Fort Smith was recently elected Chief of Staff of St. Edward Mercy Hospital in Fort Smith. Dr. Robert P. Hughes of Fort Smith was elected Chief of Staff elect.

Dr. Busby Relocates

Dr. David Busby, formerly working with the Emergency Medical Services operations at St. Edward Mercy Hospital in Fort Smith, has established a general practice in Paris, Arkansas. Dr. Busby's medical clinic is located one mile east of the town square on Highway 22. Dr. John R. Williams, formerly of Toledo, Ohio, is associated with Dr. Busby.

Dr. McPhail Joins Saudi Arabia Hospital

Dr. Jasper L. McPhail, formerly of Little Rock, has been appointed director of surgery at the New King Faisal Specialist Hospital in Saudi Arabia. Dr. McPhail was associated with the University of Arkansas Medical Center and the Baptist Medical Center in Little Rock.

Mid-South Medical Association

Dr. Gilbert Campbell and Dr. Richard B. Clark, both of Little Rock, participated in discussion panels at the 86th annual Mid-South Medical Association meeting held recently in Hot Springs.



PROCEEDINGS OF SOCIETIES

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 12:00 noon on Sunday, February 2, 1975, in the Camelot Inn, Little Rock, with the following members and guests present: Long, Saltzman, Shuffield, Duzan, Kirkley, Gray, P. Bell, Irwin, Burge, Jameson, Kemp, Harris, Clark, Orr, Kolb, Kirby, Henry, Koenig, Chudy, Wilkins, Whittaker, Brown, Verser, Watson, Purcell Smith, James Weber, Mr. Heinenmann, Mr. Harris, Mr. Warren, Mr. Schaefer, Miss Richmond, and Mr. McIntosh.

The Council transacted business as follows:

1. President Saltzman presented information on regulations of the Department of Health, Education and Welfare regarding maximum allowable cost (MAC) policy covering payment for prescription drugs under Federal health programs. Upon motion of Saltzman, the Council voted to protest the MAC type regulations to the appropriate authorities.
2. Upon the motion of Kirkley, the Council voted to reappoint Wayne Taylor of Jonesboro to the Medicaid Drug Utilization Review Committee for the Northeast District.
3. Upon the motion of Irwin, the Council appointed George Roberson to the Fourth Councilor District Professional Relations Committee.
4. Elvin Shuffield, Chairman of the Legislative

Committee, and Mr. Warren, Legislative Counsel, discussed several legislative items affecting medicine:

- A. H.B. 60, Medical School Admissions Board. The Legislative Committee recommendation was that the Society support the present admissions system of the Medical School and encourage the school to continue development of the admissions committee. Upon the motion of Orr, the Council voted to oppose H.B. 60.
- B. H.B. 104, the bill proposed for regulating Health Maintenance Organizations in the State. Upon the motion of Orr, the Council voted to support an amended version of the bill as proposed by Mr. Warren but to strongly oppose the bill in its present form.
- C. S.B. 296 to provide for selling of drugs by hospitals; this item was received for information only.
- D. H.B. 257, to amend the Healing Arts regulations to allow a physician with ten or more years of practice in another area and who is in good standing in that area to practice in Arkansas without taking the healing arts examination.
- E. S.B. 236, a bill to provide protection to members of professional review committees. The bill has passed the Senate and now goes to the House.
- F. S.B. 30, a bill to provide for appointment of one layman to every professional board. Dr. Shuffield encouraged members of the Council to discuss this legislation with their senators and representatives.
- G. S.B. 310, the bill to require reporting of malpractice claims.
- H. S.B. 311, a bill to provide for creation of

a medical malpractice commission. Mr. Warren reviewed the provisions of the proposed bill, which has been introduced in the Senate. He mentioned that there was some objection to the bill by the insurance industry. Senator Henry also mentioned some objections to the bill which have been presented to him. Upon the motion of Koenig, the Council voted to support the legislation as proposed.

- I. S.B. 317 to amend the Medical Practices Act to eliminate the Duffy Amendment, a provision requiring a physician's direct, personal, physical supervision of certain functions and procedures in the field of ophthalmology.
 - J. A bill yet to be introduced that would provide for creation of physical facilities for doing out-patient surgery, with such facilities subject to approval by the Health Department.
 - K. Emergency Medical Technician bill. This bill has undergone many changes and it is expected that it will be presented as a three-page bill which will be acceptable to the Medical Society.
 - L. Abortion. A bill has not yet been introduced. It is possible that a bill will be introduced as a committee bill without sponsorship of an individual legislator.
 - M. A sponsor has not yet been found for a proposal requiring insurance companies to pay for sterilization procedures.
 - N. S.B. 81 is a budget bill including the appropriation for the Medical Center. The Medical School allocation is only \$40,000 more than the budget approved two years ago and the school must have more money in order to keep up-to-date. Physicians were urged to encourage support of an increased budget for the school.
 - O. The Medical Board appropriation has passed the House and Senate.
5. Mr. Schaefer discussed the effect of Public Law 93-641 and suggested a Council Committee be appointed to study the legislation and to work with the Governor on State implementation. Upon motion of Orr, the Council voted to ask Chairman Long to appoint such a committee.

6. Upon the motion of Kirkley, the Council voted to request Chairman Long to appoint a committee to meet with the Governor for the purpose of discussing ways in which the State Board of Health can become more viable in the operation of the Health Department.
7. Upon the motion of Koenig, the Council voted to advise the Rehabilitation Service that there is a Society liaison committee which is available to work with them on problems relating to payment of "usual, customary and prevailing" fees and to present recommendations to the Society for consideration.
8. Upon the motion of Orr, the Council voted approval of the plan for a State Society continuing medical education accreditation program which had been prepared for submission to the Council on Medical Education of the American Medical Association.
9. The Council voted, by motion of Henry, to discontinue the practice of hosting a luncheon for senior medical students on Monday of the annual convention.
10. The Council heard recommendations regarding recognition for participants in the centennial parade to be held in connection with the Annual Session. Upon the motion of Koenig, the Council voted to approve presentation of some type of commemorative certificate or plaque to each participant in our centennial parade.
11. Information on a proposed change in the professional liability coverage offered by St. Paul from an "occurrence" to a "claims made" policy was received for the information of the Council. The Insurance Commissioner has not yet acted on St. Paul's proposal.
12. Upon the motion of Kirby, the Council approved a recommendation from the Public Relations Committee that the Society endorse Burroughs Wellcome's program of offering the MEDIX film series to television stations in the State. The Society endorsement involves writing of letters by the Society to television stations recommending that the series be included in their programming schedule in a time slot permitting the greatest exposure.

13. Joe Verser commented on treatment given him in a recent issue of MEDICO regarding his position on the healing arts examination.

The Council convened in Executive Session for consideration of the following business items:

1. The Council encouraged members of the Society to contact the Governor and/or his aids recommending appointment of Mrs. Charles F. Wilkins of Russellville to the Constitutional Convention authorized by recently-enacted legislation.
2. After discussion, and by motion of Orr, the Council voted to take no further action at this time regarding the medical students' opposition to the healing arts examination.
3. Upon motion of Koenig, the Council approved actions of the Executive Committee on January 22nd, as follows:
 - A. Authorized entertainment expenses for Mr. Warren in connection with his work with the Legislature.
 - B. Agreed that, since fringe benefits of employment are an important and integral part of an employee's pay, the same percentage formula used in the retirement plan now in force (65%) be applied to the cost of any employee's fringe benefits and added to the employee's retirement benefits. In order to protect retired employees from further deterioration of their already-reduced incomes, it was voted that the amount of retirement benefit be adjusted annually by the amount of the increase or decrease in the consumer price index published by the Bureau of Labor statistics.
4. Dr. Shuffield advised the Council that Mr. Warren had not had an increase in his retainer for a number of years and suggested an increase at this time. Upon motion of Kirkley, the Council voted to increase the retainer fee for Mr. Warren.
5. Upon the motion of Orr, the Council voted to approve the budget as presented by the Budget Committee and modified to include the increase approved for Mr. Warren.

Charles Wilkins commented on the reaction in his area to the AMA dues assessment and urged councilors to encourage members in their area to pay the assessment.

Robert Watson reported briefly on the Medical Education Foundation for Arkansas, advising the Council that the Foundation has \$50,000 invested and is receiving approximately \$3,600 annually in interest income.

Mr. Schaefer reported that the Boone County Medical Society is in the process of preparing a law suit to get the State designated one area for determination of UCR fees under Medicare, rather than the present breakdown into five areas. This was received as information only by the Council inasmuch as no action was requested at this time.

The meeting of the Council adjourned at 3:20 P.M.

APPROVED: C. C. Long, M.D.
Chairman of the Council



THINGS TO COME

Conference on Health Records

"Evaluating Patient Care: the State of the Art" will be the theme of the sixth annual interdisciplinary Conference on Health Records. The conference will be held at the Kahler Hotel in Rochester, Minnesota, June 23-25, 1975.

The event is sponsored by the Association for Health Records. Preliminary programs will be available in April from the Association for Health Records, Post Office Box 2257, Ann Arbor, Michigan 48106.

1975 Tri-State Scientific Session

Current Topics in Cardiology, May 14-16, 1975. Worthen Bank Building, Little Rock, Arkansas. Co-sponsored by the Arkansas, Louisiana, and Mississippi Heart Associations and the American Heart Association Council on Clinical Cardiology. Approved for 12 hours prescribed hours by the Academy of Family Physicians.

Certification Exams for Family Practice Board

The American Board of Family Practice announces that it will give its next two-day written certification examination on November 1-2, 1975. It will be held at five centers geographically distributed throughout the United States. Information regarding the examination may be obtained by writing: Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Kentucky 40506.

PLEASE NOTE: It is necessary for each physician desiring to take the examination to file a completed application with the Board office. Deadline for receipt of applications in the Board office is June 15, 1975.

Arkansas Chapter, American College of Surgeons

The annual spring meeting of the Arkansas

Chapter, American College of Surgeons, will be held March 21st and 22nd at the Velda Rose Towers in Hot Springs.

The Masauki Hara Lecture will be on Thursday afternoon, March 20th, at 4:00 P.M., at the University of Arkansas Medical Center auditorium. Dr. John S. Najarian, Professor of Surgery and Chairman of the Department of Surgery, University of Minnesota Medical School, will speak on "Current Status of Renal Transplantation".

1975 Annual Session — Arkansas Medical Society

The 1975 Annual Session of the Arkansas Medical Society will be held April 20-23rd at the Arlington Hotel in Hot Springs. See the *Annual Session Program* section of this Journal for details of the meeting.

This continuing medical education activity is acceptable for 8½ hours credit in Category II for the Physician's Recognition Award of the American Medical Association. The General Session program is approved for 8½ hours prescribed credit by the Academy of Family Physicians. The Family Practice section meeting Tuesday afternoon is approved for two hours prescribed credit, giving Academy members 10½ hours total credit hours.



NEW MEMBERS

Dr. Leonard Blackwell

The Logan County Medical Society has accepted Dr. Leonard Blackwell for membership. He is a native of Detroit, Michigan.

Dr. Blackwell was graduated from Wayne State

University School of Medicine in Detroit in 1950. He completed his internship at St. Joseph's Mercy Hospital, Detroit, and his residency at St. Boniface Hospital, Winnipeg, Manitoba, Canada.

Dr. Blackwell has been in general practice for twenty-one years and has recently located his practice at 114 West Fourth Street in Booneville.

Dr. Hoy B. Speer, Jr.

Dr. Hoy B. Speer, Jr., has been accepted for membership in the Clark County Medical Society. He is a native of Dermott, Arkansas.

Dr. Speer is a 1967 graduate of Ouachita Baptist University in Arkadelphia, graduating with a B.S. degree. He was graduated from the University of Arkansas School of Medicine in 1971. His internship was completed at the University of Arkansas Medical Center. He was a Family

Practice resident from 1972 until 1974 at the University Medical Center and Baptist Medical Center in Little Rock.

Dr. Speer is now in Family Practice at 204 North 26th Street in Arkadelphia.

Dr. John Robert Sellars

The Clark County Medical Society has added the name of Dr. John R. Sellars to its membership roll. He is a native of Martin, Tennessee.

Dr. Sellars graduated from the University of Tennessee at Martin in 1965 with a B.S. degree. He was graduated from the University of Tennessee College of Medicine in Memphis in 1966. Dr. Sellars completed a rotating internship in 1967 at Kingston General Hospital, Kingston, Ontario, Canada, and he completed a straight surgery internship in 1968 at the City of Memphis Hos-

pitals. From 1968 until 1972, he was a resident in General Surgery at the University of Arkansas Medical Center. He served in the United States Army at Fort Monmouth, New Jersey, from 1972 until 1974.

Dr. Sellars is practicing General Surgery at the Arkadelphia Medical Clinic in Arkadelphia.

Pulaski County

The following intern and residents are new members of the Pulaski County Medical Society:

St. Vincent Infirmary

Keith E. Ashcraft, Intern

University of Arkansas Medical Center

Mahmood Ali Khan, Resident—Anesthesiology

Fred H. Olin, Resident—Orthopedics

Paul C. Williams, Resident—Neurosurgery



OBITUARY

Dr. James Sherwood Taylor

Dr. James S. Taylor of Little Rock died January 16, 1975, at the age of seventy. He was born January 30, 1904, in Tallula, Illinois.

Dr. Taylor was a retired cardiologist and professor emeritus in cardiology at the University of Arkansas School of Medicine. He came to the University in 1952 after an early retirement from the Army, where he was chief of the cardiovascular section of Walter Reed Hospital and cardiology consultant to the Surgeon General's office.

Dr. Taylor established the Division of Cardiology at the Medical Center. After his retirement, former students established a departmental cardiology library in his name and the Arkansas Heart Association instituted an annual cardiology lectureship in his honor.

Professional memberships included the Pulaski

County Medical Society, Arkansas Medical Society, and the American Medical Association. He was a fellow of the American College of Physicians and the American College of Cardiology.

The James S. Taylor Memorial Fund has been established at the University of Arkansas School of Medicine. Checks should be sent to Box 114, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

Dr. Taylor is survived by a brother, B. W. (Jack) Taylor, and a sister, Mrs. Crum Walbaum.

Dr. Horace Hansford Holt

Dr. Horace Hansford Holt of Nashville died January 19, 1975. He was born in Tokio, Arkansas, February 22, 1909.

Dr. Holt was a graduate of Ouachita Baptist University and, in 1934, was graduated from the University of Tennessee College of Medicine, Memphis. In addition to his private practice, Dr. Holt was a past coroner of Howard County. He was a member of the Howard-Pike County Medical Society, the Arkansas Medical Society, and the American Medical Association.

Dr. Holt is survived by his wife, Elizabeth, and one sister.



Medical History Collection

Mrs. Art Martin recently displayed, at the Fort Smith Public Library, a collection of early medical equipment, photographs, and documents illuminating the history of medicine in Fort Smith.

Mrs. Martin is in the process of compiling a history of medical practice in the area for the Sebastian County Medical Society. She has received assistance in the project from Dr. Davis Goldstein, a retired Fort Smith physician.

ANSWER—Electrocardiogram of the Month

Top tracing—The PR interval is prolonged and there is a second P wave, non-conducted, superimposed on the ST segment. The rhythm is 2° heart block with 2:1 conduction. There is marked ST segment elevation in II, III, and AVF. Significant Q waves are seen in III and AVF. These changes are consistent with an acute posterior or inferior wall myocardial infarction, depending on the term you prefer, (either is acceptable).

Lower tracing—This tracing was taken following placement of a transvenous temporary catheter pacemaker for management of the heart block. The heart is being paced from the apex of the right ventricle, and the characteristic pacemaker spike is seen preceding each prolonged distorted QRS complex. The block as seen in the upper tracing, would be classified as "fixed" 2° type or Mobitz II, as contrasted to the frequent occurrence of varying or Mobitz I block.



CONVENTION SECTION

Program For Annual Meeting

April 20-23, 1975

Hot Springs

Centennial Celebration
of the
Arkansas Medical Society

CONVENTION OFFICIALS

CHAIRMAN: Robert F. McCrary, M.D., Hot Springs

CONVENTION COMMITTEE:

A. S. Koenig, M.D., Fort Smith
Dwight W. Gray, M.D., Marianna
G. Thomas Jansen, M.D., Little Rock
Winston K. Shorey, M.D., Little Rock
Gilbert S. Campbell, M.D., Little Rock
W. T. Dungan, M.D., Little Rock
Frank M. Burton, M.D., Hot Springs
George H. Collier, Jr., M.D., Paragould
Charles A. Taylor, M.D., Batesville

CENTENNIAL COMMITTEE:

Robert Watson, M.D., Chairman
H. King Wade, Jr., M.D., Hot Springs
Harry Hayes, Jr., M.D., Little Rock

DISTRICT HOST: Seventh Councilor District

SCIENTIFIC EXHIBITS CHAIRMAN: Curtis Clark, M.D., Sheridan

HISTORICAL EXHIBITS COMMITTEE: Henry V. Kirby, M.D., Harrison
G. Allen Robinson, M.D., Harrison

GOLF TOURNAMENT CHAIRMAN: W. G. Klugh, Jr., M.D., Hot Springs

MEMORIAL SERVICE CHAIRMAN: C. R. Ellis, M.D., Malvern

Postgraduate Credit

This continuing medical education activity is acceptable for 8½ hours credit in Category II for the Physician's Recognition Award of the American Medical Association.

The General Session program is approved for 8½ hours prescribed credit by the Academy of Family Physicians. The "Family Practice" section meeting on Tuesday afternoon is approved for two hours prescribed credit, giving Academy members 10½ hours total credit hours.

General Information

REGISTRATION

The registration desk will be located in the mezzanine lobby area of the Arlington Hotel and will be open as follows:

Sunday, April 20	8:00 A.M. to 5:00 P.M.
Monday, April 21	8:00 A.M. to 5:00 P.M.
Tuesday, April 22	8:00 A.M. to 5:00 P.M.
Wednesday, April 23	8:00 A.M. to 11:00 A.M.

Registration cards and badges will be prepared in advance for the officers of the State Society and for the county society delegates. Delegates are requested to present credentials in proper form when registering.

All members and visitors are required to register, as admission to all sessions will be by badge only. Bring your 1975 membership card to facilitate registration.

There will be a \$5.00 registration fee for non-member physicians.

Tickets for the Tuesday night banquet may be purchased at the registration desk.

TELEPHONE SERVICE

As a convenience to physicians in attendance at the meeting, arrangements have been made for telephone service at the Society convention registration desk. It is suggested that you give the following information to your office personnel so that you may be contacted in case of an emergency:

Arkansas Medical Society Convention Registration Desk telephone number (direct line): 624-6896.

FREE COFFEE

The Arkansas State Medical Assistants Society will serve coffee in the technical exhibit area (conference center on mezzanine level). Members are urged to visit the medical assistants for a cup of coffee and to learn more about the medical assistants organization.

GOLF TOURNAMENT

The annual golf tournament in connection with the convention will be played at Hot Springs Country Club. Entrants may qualify on the day of their choosing, April 20 through April 23. The tournament will be played under the Callaway system.

COUNCIL RECEPTION

The Council will host a reception for all members, wives, and guests of the Arkansas Medical Society at 6:30 P.M. on Sunday, April 20, in the Crystal Ballroom of the Arlington Hotel. All members are encouraged to attend and become better acquainted with the officers of the Society.

ARKANSAS STATE MEDICAL BOARD

The Arkansas State Medical Board will meet at 1:00 P.M. on Monday, April 21, in the Mars Suite of the Arlington Hotel.

CENTENNIAL PARADE DOWN CENTRAL AVENUE

At 4:00 P.M. on Monday, April 21, there will be a parade down Central Avenue in observance of the centennial of the Arkansas Medical Society. The parade will feature members of the Fifty Year Club in antique cars, the Governor, the Hot Springs Mayor, Society officers, AMA guests, Miss Arkansas, Auxiliary members in centennial costumes, bands from Hot Springs schools, and floats by health-related organizations and institutions.

MONDAY EVENING PARTY

Arkansas Blue Cross-Blue Shield will host a cocktail party for members of the Society and their wives at 6:30 P.M. on Monday in the Ballroom of the Arlington.

In conjunction with the cocktail party, the Woman's Auxiliary to the Arkansas Medical Society will present a humorous skit, "You've Come a Long Way, Baby".

FIFTY YEAR CLUB BREAKFAST

The Society will host a breakfast for members of the Fifty Year Club at 7:30 A.M. on Tuesday, April 22, in the Arlington Hotel. Members of the Fifty Year Club may make reservations for the breakfast at the Society's convention registration desk.

W. A. Hudson, M.D., a pioneer in Thoracic Surgery, will present a paper on the development of this specialty.

The Fifty Year Club will honor two centenarians at the breakfast—Dr. J. H. McCurry who practiced for many years in Cash and Dr. J. W. Morris who is still practicing in McCrory.

PAST PRESIDENTS' BREAKFAST

The traditional breakfast for former presidents of the Arkansas Medical Society will be held at 7:30 A.M. on Wednesday, April 23, in the Arlington Hotel.

TUESDAY EVENING COCKTAIL PARTY

A cocktail party will precede the Inaugural Banquet on Tuesday evening, beginning at 6:00 P.M. on the pool deck of the Arlington.

PRESIDENT'S INAUGURAL BANQUET

The President's Inaugural banquet will begin at 7:00 P.M. on Tuesday, April 22, in the Crystal Ballroom of the Arlington Hotel. Ben N. Saltzman, M.D., 1974-75 president, will be master of ceremonies.

T. E. Townsend, M.D., will be installed as president of the Society for the centennial year. "The Centennial" will be the theme for the banquet. Members of the Society and their wives are encouraged to dress in costumes of the 1870's for the banquet.

COSTUME PARADE AND BALL

Following the banquet on Tuesday evening, there will be costume ball with a parade of costumes. Those wishing to do so may participate in the costume parade, which will be judged. There will be prizes for the best male and best female costume; the prizes will be unusual mementos of the centennial celebration.

Memorial Service

A joint Society-Auxiliary Memorial Service will be held at 12:00 on Tuesday, April 22 in the Ballroom of the Arlington Hotel. C. R. Ellis, M.D., Malvern, is chairman for the service.

IN MEMORIAM

SOCIETY MEMBERS

George W. Allen, M.D., Fort Smith
Adron M. Bradley, M.D., Forrest City
Robert M. Finch, M.D., Paragould
H. H. Holt, M.D., Nashville
M. J. Kilbury, Sr., M.D., Little Rock

John M. Samuel, M.D., Little Rock
Harry W. Savery, M.D., Van Buren
Dewey W. Sloan, M.D., Beebee
James S. Taylor, M.D., Little Rock

AUXILIARY MEMBERS

Mrs. Thomas M. Durham, Hot Springs
Mrs. Charles E. Benefield, Fort Smith
Mrs. Francis Scully, Hot Springs

Mrs. James B. Crawford, Little Rock
Mrs. H. W. Hundling, Little Rock

Historial Exhibits

The Historical Exhibits Committee is arranging a number of exhibits depicting the history of medicine in Arkansas. These exhibits will be in the Arlington Hotel and will be open to the public. Members of the Auxiliary in centennial costumes will serve as hostesses for the exhibits and will distribute a brochure on the Society's centennial.

Exhibitors will include:

Mr. Harvey Jones, Springdale

Springdale Museum and Library

Henry V. Kirby, M.D., Harrison

G. Allen Robinson, M.D., Harrison

W. A. Hudson, M.D., Jasper

W. O. Arnold, M.D., Hot Springs

Mr. Floyd Wilson, Hot Springs



Scientific Exhibits

The scientific exhibits will be located in the conference center and in the lobby area on the mezzanine level. All members are encouraged to visit the exhibits as they are an integral part of the scientific program.

The following exhibits will be on display:

"Computerized Axial Tomography of the Brain"
Radiology Associates, P.A., Little Rock

Arkansas Cataract Clinic, P.A., Little Rock

"Diagnosis and Treatment of Pituitary Tumors"
Department of Neurosurgery, University of Tennessee
School of Medicine, Memphis

"Round Window Ultrasonic Irradiation—A New Approach
for Meniere's Disease"
Bailey Pappas McGrew, Ear Nose and Throat Clinic,
Little Rock

Little Rock Orthopedic Clinic, Little Rock

"Neuro-otologic Diagnosis and Treatment"
Gale Gardner, M.D. and J. T. Robertson, M.D.,
Memphis

"Retinal Neovascularization—The Sleeping Dog of the Eye"
R. Sloan Wilson, M.D., Little Rock

"Early Detection of Cancer of the Head and Neck"
James Y. Suen, M.D., Kent C. Westbrook, M.D., Sybil
Nieman, D.D.S., and Mr. Jack Diner

"The Uterine Cancer Task Force" and "Breast Examination"
Arkansas Division, American Cancer Society

Arkansas Heart Association

Business Session

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society will meet as follows:

Sunday, April 20	10:00 A.M.
Monday, April 21	7:30 A.M.
Tuesday, April 22	7:30 A.M.
Wednesday, April 23	9:00 A.M.
Wednesday, April 23	Immediately following the adjournment of the House of Delegates (brief reorganizational meeting and group photograph of new officers)

The voting members of the Council are: the councilors, the president, the first vice president, president-elect, secretary and treasurer. The speaker, vice speaker, and past presidents are members ex-officio without vote.

HOUSE OF DELEGATES

The opening session of the House of Delegates of the Arkansas Medical Society will begin at 1:00 P.M. on Sunday, April 20, in Room "C" of the Conference Center, Arlington Hotel. Speaker of the House Amail Chudy, M.D., will be presiding.

All items of business to be considered by the House must either be printed in the March issue of the Journal or submitted to the headquarters office in writing twenty days prior to the meeting. Any new business proposed during sessions of the House must have two-thirds vote of attending delegates for introduction.

Items of business will be referred by the Speaker of the House of Delegates to one of three reference committees. Open hearings on those items of business will be held by the reference committees following adjournment of the House. All members of the Society are welcome to attend the meetings of the reference committees and to express views on the various reports, resolutions, etc.

AGENDA

FIRST MEETING, HOUSE OF DELEGATES

1:00 P.M., Sunday, April 20

1. Call to Order
2. Roll Call of Delegates
3. Report of Credentials Committee
4. Introduction of Guests
 - Mrs. Howard Liljestrand, President, Woman's Auxiliary to the American Medical Association
 - Mrs. James H. Manning, President, Woman's Auxiliary to the Southern Medical Association
 - Mrs. Curry B. Bradburn, President, Woman's Auxiliary to the Arkansas Medical Society
 - Raymond T. Holden, M.D., Vice Chairman, Board of Trustees, American Medical Association, Washington, D. C.
5. Address by Max H. Parrott, M.D., President-elect, American Medical Association, Portland, Oregon
6. Address by Ben N. Saltzman, M.D., President, Arkansas Medical Society, Little Rock

7. Adoption of minutes of the 98th Annual Session as published in the June 1974 issue of the Journal of the Arkansas Medical Society
8. Adoption of minutes of the special meeting of the House of Delegates of the Arkansas Medical Society as published in the January 1975 issue of the Journal of the Arkansas Medical Society
9. Report from Chairman of the Council, C. C. Long, M.D.
10. Reports of Committees
(Reports published in the March Journal may be amended by committee chairmen. All reports will be referred to the reference committees.)
11. Old Business
12. New Business
(No resolutions were received by the headquarters office by publication date.)
13. Announcements of Vacancies on State Boards
(see separate listing)
14. Selection of Society Nominating Committee for 1975-76 Society Officers
15. Adjournment

AGENDA
FINAL MEETING, HOUSE OF DELEGATES
10:00 A.M., Wednesday, April 23

1. Call to Order
2. Report of the Nominating Committee
3. Elections

Society Officers:

President-elect

First Vice President

Second Vice President

Third Vice President

Treasurer

Secretary

Speaker of the House of Delegates

Vice Speaker of the House of Delegates

Councilors (one from each of the ten councilor districts)

Councilors whose terms expire are:

1. Eldon Fairley, M.D., Osceola
2. Paul Gray, M.D., Batesville
3. Fred C. Inman, Jr., M.D., Carlisle
4. Raymond Irwin, M.D., Pine Bluff
5. John H. Moore, M.D., El Dorado
6. Karlton Kemp, M.D., Texarkana
7. Curtis Clark, M.D., Sheridan
8. W. Payton Kolb, M.D., Little Rock
9. Morriss M. Henry, M.D., Fayetteville
10. C. C. Long, M.D., Ozark

American Medical Association Delegate and Alternate:

Delegate to the American Medical Association (term of Purcell Smith, M.D., Little Rock, expires December 31, 1975)

Alternate Delegate to the American Medical Association (term of T. E. Townsend, M.D., expires December 31, 1975)

Vacancies on the State Boards

A. State Medical Board

Term of Frank Burton, M.D., Hot Springs, Sixth Congressional District,

expires December 31, 1975

B. State Board of Health

- (1) Term of Ben N. Saltzman, M.D., Third Congressional District, expires December 31, 1975
- (2) Term of C. Lewis Hyatt, M.D., Sixth Congressional District, expires December 31, 1975
- (3) Term of William S. Orr, Jr., M.D., Member-at-Large, expires December 31, 1975
4. Address by Raymond T. Holden, Vice Chairman, Board of Trustees, American Medical Association
5. Reports of Reference Committees:
 - Committee No. 1: T. Duel Brown, M.D., Chairman
 - Committee No. 2: H. King Wade, Jr., M.D., Chairman
 - Committee No. 3: L. A. Whittaker, M.D., Chairman
6. Supplemental Report of the Council, C. C. Long, M.D., Chairman
7. New Business
8. Adjournment

REFERENCE COMMITTEES

Reference committees are appointed by the Speaker of the House of Delegates to consider the various reports and resolutions. Reports published in the March issue of the Journal, as well as any reports and resolutions presented at the first meeting of the House on April 20, will be referred by the speaker to the reference committees. The committees will hold open hearings at 3:30 P.M. on Sunday, April 20, to give all members an opportunity to present their views on the various items of business. Following the open hearings, the reference committees will hold executive sessions for the purpose of preparing recommendations and reports for the House of Delegates. Reports of the Reference Committees will be acted upon by the House at the Wednesday session.

Members of the Reference Committees are:

Reference Committee No. 1:

T. Duel Brown, M.D., Little Rock, Chairman
 C. R. Ellis, M.D., Malvern
 Charles R. Henry, M.D., Little Rock
 Ross Fowler, M.D., Harrison
 Stanley Applegate, M.D., Springdale

Reference Committee No. 2:

H. King Wade, Jr., M.D., Hot Springs, Chairman
 Joseph A. Norton, M.D., Little Rock
 Joe Verser, M.D., Harrisburg
 Jack W. Kennedy, M.D., Hot Springs
 John P. Wood, M.D., Mena

Reference Committee No. 3:

L. A. Whittaker, M.D., Fort Smith, Chairman
 C. Lewis Hyatt, M.D., Monticello
 H. W. Thomas, M.D., Dermott
 Robert Watson, M.D., Little Rock
 Ben N. Saltzman, M.D., Little Rock

Speaker Chudy has asked the presidents of the sophomore, junior and senior classes at the University of Arkansas School of Medicine to sit in on the reference committees as observers. They are as follows: Reference Committee No. 1, Charles Mabry, Senior Class; Reference Committee No. 2, Gary Barger, Junior Class; Reference Committee No. 3, Chad Deal, Sophomore Class.

STATE BOARD VACANCIES

Arkansas State Medical Board

A vacancy occurs in the Sixth Congressional District position on the Arkansas State Medical Board. Members from the counties in the district are urged to meet immediately following adjournment of the House of Delegates meeting on Sunday to vote for nominees. Nominations should be reported to the convention registration desk (only one nominee required). Frank M. Burton, M.D., of Hot Springs is currently serving a term which expires December 31, 1975, and he is eligible for reappointment. Counties in the Sixth District are: Arkansas, Chicot, Cleveland, Dallas, Desha, Drew, Garland, Grant, Hot Spring, Jefferson, Lincoln, Lonoke, Saline.

Arkansas State Board of Health

Vacancies occur in the Third and Sixth Congressional Districts as well as in the Member-at-Large position on the Arkansas State Board of Health.

Members from the Third and Sixth Congressional Districts are urged to meet immediately following adjournment of the House of Delegates on Sunday to vote for nominees. Nominations should be reported to the convention registration desk (three required for each position). Members presently serving and counties in the districts are:

Third District —

Ben N. Saltzman, M.D., Mountain Home, term expires December 31, 1975.

Counties in District: Baxter, Benton, Boone, Carroll, Crawford, Franklin, Johnson, Logan, Madison, Marion, Newton, Scott, Searcy, Sebastian, Van Buren, and Washington.

Sixth District —

C. Lewis Hyatt, M.D., Monticello, term expires December 31, 1975.

Counties in District: Arkansas, Chicot, Cleveland, Dallas, Desha, Drew, Garland, Grant, Hot Spring, Jefferson, Lincoln, Lonoke and Saline.

Members are urged to present their nominations for the member-at-large position to their district representative on the Society Nominating Committee.

ARKANSAS FOUNDATION FOR MEDICAL CARE

The Arkansas Foundation for Medical Care will meet on Wednesday, April 23, immediately following the re-organizational meeting of the Council of the Arkansas Medical Society. The Foundation meeting will be held in Room "C" of the Conference Center of the Arlington Hotel. The Foundation meeting is open to all physicians but only members of the Foundation may vote on items of business.

A meeting of the Board of the Foundation will follow adjournment of the general membership meeting of the Foundation.

CONTINUING MEDICAL EDUCATION

CREDIT HOURS

AMA Physician's Recognition Award

This continuing medical education activity by the Arkansas Medical Society is acceptable for 8½ hours credit in Category II for the Physician's Recognition Award of the American Medical Association.

Academy of Family Physicians

The General Session program of the Arkansas Medical Society is approved for 8½ hours prescribed credit by the Academy of Family Physicians.

The "family practice" section meeting on Tuesday is approved for 2 hours prescribed credit, giving Academy members 10½ total credit hours for attendance at both the general session and section meeting.

Scientific Program

GENERAL SESSION ARKANSAS MEDICAL SOCIETY

Monday Morning, April 21

Presiding: G. Thomas Jansen, M.D., Little Rock, First Vice President

History of Medicine

- 9:00 Introduction and Opening Remarks
Harry Hayes, Jr., M.D., Little Rock
- 9:10 "Arkansas Territorial Medicine"
Marion S. Craig, M.D., Little Rock
- 9:25 "Development of Legal Medicine in Arkansas"
Judge Ed F. McFaddin, Little Rock
- 9:40 "Early Medicine in Hot Springs"
H. King Wade, Jr., M.D., Hot Springs
- 10:00-10:30 INTERMISSION—Visit the Exhibits—
- 10:30-10:50 "Natural History of Juvenile Rheumatoid Arthritis and its Differential from Rheumatoid Arthritis in the Adult—Juvenile Rheumatoid Arthritis Sequela in the Adult"
Jane Schaller, M.D., Associate Professor of Medicine, Department of Pediatrics, University of Washington School of Medicine, Seattle
- 10:50-11:10 "Surgery of the Eye and Orbit"
Richard R. Tenzel, M.D., North Miami Beach, Florida
- 11:10-11:30 "Recent Developments in Otology"
Gale Gardner, M.D., Memphis
- 11:30-11:50 "Recent Advances in Diagnostic Radiology"
Jack Rabinowitz, M.D., Professor and Chairman, Department of Diagnostic Radiology, University of Tennessee Medical Center, Memphis

Monday Afternoon, April 21

Presiding: Asa A. Crow, M.D., Paragould, Second Vice President

History of Medicine

- 12:45 "Early Medicine in Little Rock and Pulaski County"
Henry Hollenberg, M.D., Little Rock
- 1:05 "Early Medicine in Northwest Arkansas"
Ruth Ellis Lesh, M.D., Fayetteville
- 1:25 "Early Medicine in North Central Arkansas"
Henry V. Kirby, M.D., Harrison
- 1:45 INTERMISSION—Visit the Exhibits—

Trauma

- 2:00 "Emergency Medical Services in Arkansas"
Samuel E. Landrum, M.D., F.A.C.S., Fort Smith
- 2:30 "Shock"
Gerald E. Gustafson, M.D., F.A.C.S., Tulsa
- 3:00 "Chest Injuries"
Carl L. Williams, M.D., F.A.C.S., Fort Smith
- 3:30 "Fractures and Dislocations"
Peter J. Irwin, M.D., F.A.C.S., F.A.A.O.S., Fort Smith

Tuesday Morning, April 22

Presiding: Donald L. Toon, M.D., Crossett, Third Vice President

History of Medicine

- 8:45 "Early Medicine in South Central Arkansas"
J. P. Price, M.D., Monticello
- 9:05 "Early Psychiatry in Arkansas"
Fred Henker, M.D., Little Rock
- 9:25 "What Organized Medicine has Contributed to this State"
Robert Watson, M.D., Little Rock
- 9:45-10:00 INTERMISSION—Visit the Exhibits—
- 10:00-11:30 PANEL PROGRAM: "Regionalization of Perinatal Health Care"
Introduction: David L. Barclay, M.D., Professor and Chairman, Department of Obstetrics and Gynecology, University of Arkansas School of Medicine
Obstetrics: Henry C. Heins, M.D., Associate Professor, Department of Obstetrics and Gynecology, Medical University of South Carolina College of Medicine, Charleston
Pediatrics: Stanley Graven, M.D., Professor, Department of Pediatrics, University of Wisconsin Medical School, Madison
Discussion: Raymond T. Holden, M.D., Clinical Professor of Obstetrics and Gynecology, Georgetown University School of Medicine, Washington, D. C.
Panelists:
Alice G. Beard, M.D., Professor, Department of Pediatrics, University of Arkansas School of Medicine
Byron L. Hawks, M.D., Professor, Department of Obstetrics and Gynecology, University of Arkansas School of Medicine
Ben N. Saltzman, M.D., Professor and Chairman, Department of Family and Community Medicine, University of Arkansas School of Medicine
- 11:30-11:50 "Bronchial Asthma—Pathogenesis and Management"
Raymond Slavin, Professor of Medicine and Director of the Section of Allergy and Immunology, St. Louis University School of Medicine

Group and Specialty Section Meetings

Monday, April 21

The *Alan Cazort Allergy Society of Arkansas* will hold a luncheon meeting on Monday, April 21, beginning at 12:00 noon in the Jupiter Room of the Arlington Hotel. Raymond Slavin, Professor of Medicine and Director of the Section of Allergy and Immunology at the St. Louis University School of Medicine, will speak on "Asthma in the Child Under Two". The luncheon will be Dutch treat. Vida Gordon, President of the Allergy Society, extends an invitation to all members, especially pedia-

tricians and family practitioners, to attend the luncheon meeting.

The *Association of Tumor Clinic Staff Members in Arkansas* will hold a luncheon meeting and Cancer Seminar on Monday, April 21, in the Mercury Suite of the Arlington Hotel. Raymond Irwin, M.D., Chairman, has announced that James Y. Suen, Chief of the Division of Otolaryngology at the University of Arkansas School of Medicine, will speak on "Present Status of Immunotherapy in Management of Cancer".

Tuesday, April 22

The *Arkansas Chapter, American College of Radiology*, will meet at 9:00 A.M. in the Arlington. A panel program on "What's New in Nuclear Medicine?", "What's New in Radiation Oncology?", "What's New in Diagnostic Radiology" and a Diagnostic Film Panel will be presented in the morning session. Refreshments will be served at 12:00 noon and lunch at 12:30 P.M. Jack Rabinowitz, M.D., Professor and Chairman of the Department of Diagnostic Radiology at the University of Tennessee, will speak at 1:30 P.M. and there will be a business session from 2:00 to 3:00 P.M.

The *Eye Section* of the Arkansas Medical Society will meet at 9:00 A.M. on Tuesday, April 22, in the Arlington Hotel. Richard R. Tenzel, M.D., North Miami Beach, will be guest speaker. Dr. Tenzel will discuss plastic surgery of the eye and adnexa. A joint luncheon of the EENT section will begin at 12:30 P.M.

The *Ear, Nose and Throat Section* will meet at 9:30 A.M. in the Arlington for a scientific program. Gale Gardner, Otologist with special interest in Neuro-Otology who is in private practice in Memphis, will be guest speaker.

The *Society of Arkansas Urologists* will meet at 12:30 P.M. on Tuesday, April 22, in the Arlington Hotel. The meeting will continue through luncheon until about 4:30 P.M. Eugene Carlton, M.D., Professor and Chairman of the Division of Urology at Baylor University School of Medicine will be guest speaker.

The *Arkansas Chapter of the American College*

of Obstetricians and Gynecologists will have a 12:30 P.M. luncheon meeting on Tuesday, April 22, in the Arlington Hotel. Participants in the General Session Panel Program on the morning of the 22nd will provide the program for the luncheon meeting, expanding on their panel subjects and participating in a "question and answer" session. The panel participants are Drs. Henry C. Heins, Stanley Graven, Raymond T. Holden, David L. Barclay, Alice G. Beard, Byron L. Hawks, and Ben N. Saltzman. The Chapter extends an open invitation to all members to attend the session.

The *Arkansas Chapter of the American Academy of Pediatrics* will have a luncheon meeting at 12:00 noon on Tuesday, April 22, in Room 1 of the Jupiter Suite, Arlington Hotel. A business session will follow the luncheon. At 2:00 P.M., the Chapter will present a program on "Juvenile Rheumatoid Arthritis" in Room "C" of the Conference Center and invites interested physicians to attend. Speakers will be:

Jane Schaller, M.D., Associate Professor of Medicine, Department of Pediatrics, University of Washington School of Medicine, Seattle

Earl J. Brewer, Jr., M.D., Professor of Pediatrics, Baylor College of Medicine, Houston
W. Malcolm Granberry, M.D., Clinical Assistant Professor of Orthopaedic Surgery, Baylor College of Medicine and University of Texas Medical School at Houston

The *Arkansas Academy of Family Physicians*

will have a luncheon meeting at 12:30 P.M. on Tuesday, April 22, in the Arlington Hotel. Following luncheon, there will be a two-hour panel discussion moderated by Ben N. Saltzman, M.D. on the subject of the Family Practice Boards and the Family Practice Department at the University of Arkansas Medical Center. A brief meeting of the Board of Directors will follow the panel program. This meeting is approved for 2 hours credit by the AAFP.

The *Arkansas Society of Anesthesiologists* will meet for luncheon at 12:30 P.M. on Tuesday, April 22, in the Arlington Hotel. Richard Clark, M.D., program chairman, advises that the guest speaker will be Stanley Deutsch, M.D., Professor and Chairman, Department of Anesthesiology, University of Oklahoma Medical Center, Okla-

homa City. His topic will be "Anesthesia, Operation, and Renal Function".

The *Arkansas Society of Pathologists* will meet at 12:00 noon on Tuesday, April 22, in the Arlington Hotel. A business session will be held in connection with the luncheon.

The *Neurosurgery Section* will meet for lunch at 12:30 P.M. on Tuesday, April 22, in the Arlington Hotel. The meeting agenda will include a discussion of section business and a review of neurosurgical interests on national and state levels.

The *Arkansas Society of Internal Medicine* will hold a luncheon meeting beginning at 12:30 P.M. on Tuesday, April 22, in the Arlington Hotel. The president, McDonald Poe, M.D., announces the program title as "Socioeconomics of Internal Medicine in Arkansas".

Woman's Auxiliary

The 51st annual session of the Woman's Auxiliary to the Arkansas Medical Society will be held April 20-22, 1975, in the Arlington Hotel, Hot Springs.

The following is an outline of the tentative convention schedule:

SUNDAY APRIL 20

- 2:00 P.M. Board Meeting
- 6:30 P.M. Reception Hosted by Society

MONDAY, APRIL 21

- 9:00 A.M. House of Delegates
- 12:00 Noon Luncheon
- 4:00 P.M. Centennial Parade sponsored by Society
- 6:30 P.M. Reception hosted by Blue Cross-Blue Shield for Society and Auxiliary, and skit presented by Auxiliary, "You've Come a Long Way, Baby"

TUESDAY, APRIL 22

- 9:00 A.M. House of Delegates
- 12:00 Noon Luncheon
- Post Convention Board Meeting
- 6:00 P.M. Cocktail Party with Society
- 7:00 P.M. Society's Inaugural Banquet with Costume Ball following banquet

The Auxiliary will have as its guest for the convention Mrs. Howard Liljestrang, President of the Woman's Auxiliary to the American Medical Association, and Mrs. James H. Manning, President of the Woman's Auxiliary to the Southern Medical Association.

Mrs. Deno Pappas of Hot Springs is Convention Chairman and Mrs. Curry Bradburn of Little Rock is president of the State Auxiliary.

Technical Exhibits

The business firms who purchase exhibit space at our Annual Session contribute a great deal to the financing, as well as to the educational aspects, of the meeting. The number of visits to the technical exhibits is the only criterion by which these companies can judge the value they receive from the investment in booth rental, displays and employee's time. You will be rewarded for the time you spend visiting the exhibits. Following are descriptions of displays to be featured.

SANDOZ PHARMACEUTICALS

Sandoz Pharmaceuticals cordially invites you to visit our display at booth #1, where we are featuring MELLARIL, HYDERGINE and SANFOREX. Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

ROCHE LABORATORIES

A cordial invitation is extended to all members and guests to visit the Roche Laboratories booth.

DORSEY LABORATORIES

Dorsey Laboratories will welcome your visit to our booth, where we will have medical-educational material available on otitis media and smoking control, as well as product information on a new long-acting bronchodilator Metaprel (metaproterenol sulfate) and other members of the Dorsey family.

PARKE-DAVIS AND COMPANY

Our representatives will be available to discuss selected pharmaceutical products.

RATHER, BEYER, AND HARPER

Representatives of Rather, Beyer, and Harper will have brochures and all information on the Arkansas Medical Society Group Plans of Insurance, specifically the Income Protection Plan, which is now issued on a guaranteed renewal basis and the office overhead expense plan. Records will be available so that each physician may review the insurance coverages which he has under the group plans endorsed by the Arkansas Medical Society.

AYERST LABORATORIES

Our Representatives look forward to a visit with you, and for the opportunity to discuss the Ayerst Products and Services of interest to you.

WILLIAM P. POYTHRESS AND COMPANY, INC.

William P. Poythress and Company, Inc., manufacturers of ethical pharmaceuticals for one-hundred-nineteen years, cordially invites you to visit our exhibit where our representative, Mr. T. L. "Bru" Brubaker, will be glad to discuss any Poythress products.

FIRST ARKANSAS LEASING CORPORATION

Leasing—the advantages, options, and Internal Revenue Service requirements will be explained by FALCO representatives. We will have someone available during the display hours and invite the members of the Society to visit with us.

ORTHO PHARMACEUTICAL CORPORATION

Ortho Pharmaceutical Corporation is proud to present the most complete line of medically accepted products for the control of conception. Also on display will be our well-known products for the treatment of vaginitis.

ARKANSAS BLUE CROSS-BLUE SHIELD

Arkansas Blue Cross-Blue Shield cordially invites you to visit our booth where our representatives will be happy to discuss any of the programs we administer.

Currently, there are approximately 550,000 Arkansans enrolled in Arkansas Blue Cross-Blue Shield and we welcome the opportunity to serve you.

STUART PHARMACEUTICALS

The Stuart Pharmaceuticals booth consists of graphic panels, product samples and literature describing some or all of the following products: MYLANTA, MYLANTA II, MYLICON 80, CHEWABLE SORBITRATE, SORBITRATE Sublingual and Oral, KINESED, STUARTNATAL 1+1, and others.

MOUNTAIN VALLEY WATER

Mountain Valley Water ranks with leading natural waters of the world. Low-salt, hard, pleasant to taste, it is the only spring water available across the nation. The spring, at Hot Springs, has been used constantly for 104 years.

E. R. SQUIBB AND SONS

E. R. Squibb and Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. At our booth, we will be pleased to present up-to-date information on these products and services.

UNIMED, INC.

Unimed, Inc., supplies specialized electronic equipment and supplies services to hospitals and clinics. The emphasis is heavily on Cardiology services, particularly computerized processing of electrocardiograms.

A cordial invitation is extended to all members of the Society to visit the booth.

MALLINCKRODT, INC.

Factory-trained men will be available to discuss SONILYN®, DIUTENSEN®, RYNATAN®, RYNATUSS®, and other Mallinckrodt pharmaceuticals.

FIRST VARIABLE LIFE INSURANCE COMPANY

A SHORT LESSON ON CUTTING INCOME TAXES!!!

It's called deferred compensation.

The words "deferred compensation" sound complicated, but the idea is really quite simple. All it means is that you agree to have your Medicaid payments held back by the state. YOU DON'T PAY FEDERAL INCOME TAXES ON THAT MONEY. It's invested, and the money your "deferred" dollars earns is NOT TAXED, either.

Choice of Fixed or Variable Annuity. Low 5% sales charge.

GENERAL MEDICAL LITTLE ROCK

You are invited to visit the General Medical Little Rock

exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you.

REYNOLDS ORTHO II

Our exhibit will feature "The Time Savers" from Orthopedic Casting Laboratory. We will be introducing the new, pre-padded one piece casting and splinting system. OCL products are based on simplicity of construction and application, with most procedures requiring less than three minutes. OCL offers a complete line of casts, splints, and accessories.

CUMMINGS X-RAY COMPANY

We plan to exhibit the 300 M.A. Trace-Ray X-Ray Unit at 125 P.K.V., the first total X-Ray System designed for private practice that includes a Fail-Safe positive Beam Collimator. The Pakorol 14 X Automatic Processor. High quality medical X-Rays in the tradition of excellence will be demonstrated.

The Cambridge VS-4 E.C.G. the first E.C.G. safe enough, accurate enough to exceed all requirements recommended by the American Heart Association will also be demonstrated.

A. H. ROBINS COMPANY

You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you.

BRISTOL LABORATORIES

You are cordially invited to visit Bristol Laboratories' exhibit. Our representatives at the booth welcome the opportunity to answer your questions concerning the Bristol line of products featuring: Cefadyl® (sterile cephalirin sodium); Kantrex® Injection (kanamycin sulfate injection); Tegopen® (sodium cloxacillin); Tetrex® (tetracycline phosphate complex); Prostaphlin® (sodium oxacillin); Saluten-sin® (hydroflumethiazide and reserpine); Naldecon® (antihistamine decongestant); and Polycillin® (ampicillin).

AMS DIVISION, SYSTEMEDICS, INC.

More people are receiving more and better health care today than ever before. However, insurance forms and other

growing paper work requirements, along with shortages of trained personnel, have led to increased management costs and increased demands on time. Too often, administrative control has suffered from lack of timely summary information, even in offices using semiautomated information handling systems.

SYSTEMEDICS/AMS specializes in the development of computerized management systems for the health care professions...our main business. SYSTEMEDICS/AMS' proven system for management of accounts receivable generates the numerous summary information reports that will save time and money, and provide the control necessary in the operation of medical offices and clinics.

A full range of information management systems is available including storage of vital financial data on microfilm at a second location.

THE UPJOHN COMPANY

Our exhibit will feature our new antiarthritic product, Motrin, as well as products in the area of infectious diseases and diabetes.

MARION LABORATORIES

Marion Laboratories representatives will be delighted to welcome members of the Society to our booth to discuss our latest patient benefit product with you. NITRO-BID Ointment (Nitroglycerin 2%...our most recent product in our nitroglycerin family).

UAD LABORATORIES

UAD Laboratories will feature two of its leading products in its booth—ENDAL Tablets, a new concept in nasal decongestants; and CEZIN, a new mineral product with an unlimited potential.

* * *

The Arkansas Medical Society expresses appreciation to the following companies for educational grants for the Society's convention:

Eli Lilly and Company
Mead Johnson Laboratories
A. H. Robins Company

House of Delegates Business Affairs

Reports printed below are brought to the attention of individual members and the county medical societies. The items reported here represent those received in time for publication in advance of the meeting. All reports will be referred to reference committees. Members are urged to attend the open hearings of the reference committees to express their views. Reference committee hearings are scheduled for 3:30 P.M. on Sunday, April 20.

ANNUAL COMMITTEE REPORTS

Committee on Cancer Control

Charles R. Henry, M.D., Chairman

I want to thank the members of the Cancer Control Committee for their cooperation this

past year. The attendance has been better and I do think we have made some progress.

The Cancer Control Committee of the Arkansas Medical Society met at 9:30 on November 24th during the mid-winter session of the Society. The enclosed resolution was adopted unanimously by the following members of the Committee: Drs. Barclay, Broadwater, Wren and Henry. Dr. Jay was out of the State and unable to attend.

Uterine Cervical Cancer

WHEREAS, approximately 100 women in Arkansas die needlessly each year from cancer of the uterine cervix, and

WHEREAS, the early detection of cancer of the uterine cervix can result in the institution of

effective curative therapy in a high percentage of cases, and

WHEREAS, screening for early cancer and pre-cancer by methods using exfoliative cytology studies have proven to be simple, effective and economical, and

WHEREAS, only about 50% of the adult female population in this State has ever been screened for cervical cancer, and

WHEREAS, a large percentage of the adult female population is regularly seen for pre-employment or other examinations in employment facilities or in the private offices of practicing physicians of Arkansas and in State operated clinic facilities, therefore be it

RESOLVED, that the Arkansas Medical Society go on record as officially endorsing the widest use of screening for cervical cancer among the adult female population as a sound health practice, and be it further

RESOLVED, that such screening be recommended in all adult females at risk of cancer of the cervix at periodic intervals, and be it further

RESOLVED, that private physicians be encouraged to instruct their patients of the wisdom of cervical cytology studies for early detection of uterine cancer and urge patients to have such screening procedures done, and be it further

RESOLVED, that preemployment and periodic employment physical examinations for adult females at risk of cervical carcinoma include assurance of cervical cancer screening within the year at the time of or prior to the examination, and be it further

RESOLVED, that copies of this resolution be appropriately circularized by the Arkansas Medical Society to individual members of the Arkansas Medical Society, to County Medical Societies, to the Arkansas and to the American Cancer Societies, to the individual members of the Arkansas Hospital Association, to the Arkansas Health Department, to the hospitals in Arkansas and to the Arkansas Employment Security Division.

The Cancer Control Committee would like an endorsement on approval to support the "Uterine Task Force" of the American Cancer Society for a booth at the Arkansas State Livestock Show in Little Rock in September, 1975.

The idea being that women may come in and have a Paps smear taken free and if any suspicious lesion is found, she is referred to her L.M.D. for

treatment or referral. This is a program of the American Cancer Society in conjunction with the State Health Department.

This program has been tried at the Oklahoma City State Fair and the Tulsa State Fair and gratifying results have been obtained.

All the Committee is requesting is approval of this project—no money from the State Society is expected at this time.

Sub-Committee on National Legislation

William S. Orr, Jr., M.D., Chairman

The Sub-Committee on National Legislation met at the Winter Meeting in November for a short period of time. The major discussion concerned the continued necessity that the State Office supply to each physician information concerning any major national health insurance or national legislation that involves medical practice for their perusal and their assistance in contacting members of the National Legislature concerning their feelings of these particular items. The Committee would like to compliment the State Office for its services in this particular area in the past and, as above mentioned, to continue to be the focus for the dissemination of this material to members of the State Society. The Sub-Committee also wishes to endorse again the necessity for all members of the State Society to consider joining Ark-Pac as it represents the one organization of medicine that does concern itself primarily with the political activities both as concerns candidates as well as concerning national legislation. There were no other major topics discussed at the November meeting.

Committee on Public Health (Rural Health)

Ben N. Saltzman, M.D., Chairman

The Committee on Public Health was active this year in support of the Arkansas Health Department's campaign to combat venereal disease. The chairman serves on the V.D. Alliance Board and has been active in support of its grant requests through the Regional Medical Program.

From the rural health standpoint, the Committee has been kept aware of the program of the AMA Council on Rural Health. The Chairman, a former member of the Council, presented Arkansas' activities in rural health over the years to a meeting of the Chairmen of State Rural Health Committees in a paper entitled "The

Rural Health Program in Arkansas." This occurred prior to the opening of the National Rural Health Conference in Detroit, Michigan, on April 24, 1974. The Chairman attended this conference and brought back further suggestions for the Arkansas program. The paper was published in the December issue of the AMS Journal. Dr. C. C. Long, Chairman of the Arkansas Medical Society Council, is a member of the AMA Council on Rural Health.

The Committee this year again sponsored the Arkansas Medical Society Awards to the health winners in the 4-H O'rama. Members of the Society Council served as judges and presented the awards to six district winners. The Chairman presented the State award to the State winner at Conway, Arkansas, on August 13, 1974.

The Chairman continues to serve as a member of the State Board of Health, thus being enabled to maintain an awareness of the problems and progress of the State Health Department. The Arkansas Medical Society continues to enjoy an excellent relationship with the Department and with its officials. Dr. John Harrel, the State Health Officer, has resigned. Dr. Rex Ramsay is now Acting Director of the Health Department. He, too, is interested in maintaining rapport with the Committee and with the State Medical Society. The Chairman plans to attend the National Rural Health Conference in Roanoke, Virginia, in March of 1975.

The Committee met during the Society's fall meeting and set realistic goals, chiefly in support of ongoing AMA programs.

Committee on Mental Health

W. Payton Kolb, M.D., Chairman

The primary concern of this time is in regard to national health insurance. No specific action of the Arkansas Medical Society is requested now; however, alertness must be maintained so that when a plan is developed it will not be such that would recreate the old custodial, over-crowded, under-staffed "asylums" of the past for the treatment of the psychiatric patient. No health insurance program of any type should offer the individual with an emotional or mental problem less benefits than it would for a physical illness.

This Committee notes with regret the decision of the American Medical Association to abolish the Council on Mental Health as part of its efforts to offset decreasing revenues. This is a

most important Council and has made significant contributions in the field of mental health. It is hoped this Council can be re-established as soon as possible.

The Committee discussed at length an obvious trend for insurance companies, state and federal agencies to move more slowly and seemingly be somewhat indifferent to the paying of claims where mental health is concerned. Sufficient data is not available at this time to request specific action. Further study will be made.

Sub-Committee on Traffic Safety

Carl L. Williams, M.D., Chairman

The Sub-Committee on Traffic Safety met on two occasions in the past year.

The first meeting was held during the winter session of the Arkansas Medical Society. The group favored continued efforts to incorporate medical evaluation of drivers at the time of license renewal. Eye examination was thought the most urgent type of evaluation that should be sought.

Mandatory seat belt legislation was not thought appropriate at this time; however, continued efforts to encourage seat belt and shoulder harness usage through public education is strongly recommended.

The decrease in highway deaths during the past year was thought primarily related to the 55 MPH speed limit and the continuation of this speed limit was recommended.

The Committee voted to continue to support legislation for an ongoing growth and development of emergency medical services and its systems.

A second meeting of the Committee occurred December 11, in association with the Governor's Conference on Highway Safety. Support of the Highway Department legislative programs for driver education and licensure was endorsed. The various agencies throughout the State concerned with highway safety discussed and coordinated programs of joint interest.

Sub-Committee on Liaison with Vocational Rehabilitation

John P. Wood, M.D., Chairman

Members of the Sub-Committee on Liaison with Vocational Rehabilitation met at the Mid-Winter Meeting of the Arkansas Medical Society November 24 at the Downtown Holiday Inn.

Mr. R. Lewis Urton, Deputy Commissioner of

the Rehabilitation Service, met with the Committee and reported on the activities of the Rehabilitation Services for 1974. Your chairman also met that day with Dr. Howard Schwander, Medical Consultant to the State Office of Vocational Rehabilitation.

Mr. Urton spoke at length on the problems from the national level during the past two years of funding Vocational Rehabilitation. He elaborated on the increasing acceptance by employers of handicapped—both physically and those with a past history of mental illness.

Much of the discussion directed toward Mr. Urton was concerning Vocational Rehabilitation's role in the new Spinal Cord Task Force that is presently being developed in Arkansas. This program is far-reaching and of great interest to the physicians of the State.

Dr. Schwander revealed that there were presently 1,106 specialty physicians on the approved lists participating in the rehabilitation program. There were 33,257 cases seen in 1973-1974, of which 5,203 cases were closed as employed.

He stated that the present policy of non-payment for assistant's fee in surgery would continue.

Both Dr. Schwander and Mr. Urton expressed appreciation for the cooperation of the physicians of Arkansas with the Rehabilitation Service.

**Report of the
Committee on Medical Education
Lee B. Parker, Jr., M.D., Chairman**

The Committee met during the winter session of the Society in Little Rock in November 1974, with Dr. Rutledge Howard of the AMA Continuing Education Division as its guest.

After appropriate discussion, the Committee voted to ask the Society to establish an office of continuing education within the Society headquarters and then to request AMA inspection for becoming approved by the AMA to certify continuing education programs put on by the Society, its component societies, and other agencies which might desire such certification.

The significance of such approval by the AMA is readily apparent when one studies the trends in PSRO, medical audit, possible relicensure proposals, etc.

This proposal was then presented to the Council at the winter meeting. The Council voted to attempt to have Arkansas Medical Society educational programs accredited so that physicians

could receive credit on their continuing education programs under any relicensure provisions adopted in the future.

At the time this report is being written, the Society is using the District of Columbia Medical Society Manual of Accreditation as a guide for the Arkansas Medical Society manual.

Our request was submitted to AMA headquarters in January. If acted upon by the appropriate AMA body, the inspection will probably occur this spring.

Other matters discussed briefly at the winter meeting of the committee included:

1. Area Health Education Centers
2. AMA inspection of the University of Arkansas School of Medicine Continuing Education program
3. Plans for using the Arkansas Educational TV network to broadcast continuing education programs
4. Plans to develop a health consumers telephone tape service at UAMC similar to the present RIMS service for physicians and nurses. Reassurance was given that prior to such service being established, consultations and coordination would be made with the Pulaski County Medical Society and with this committee.

No other business has been considered.

**Committee on Public Relations
Joseph A. Norton, M.D., Chairman**

The Committee on Public Relations and Mr. John McIntosh, the Assistant to the Executive Vice President, have been active in several areas which have received the attention of the public this year.

The Society's Physician Placement Service received public recognition at the Physician's Opportunity Fair held at the University of Arkansas Medical Center in October of 1974. The Fair was co-sponsored by the Society, the School of Medicine, and the Arkansas Caduceus Club. One day was set aside so the medical students, interns and residents could become more aware of the opportunities for medical practice in the State. Representatives of thirty-four communities and the Placement Service each had exhibit booths displayed in the student union. Students spent the day visiting the various booths, where the community representatives explained the practice opportunities in their localities. Based on the overall reaction of those

participating, and the press reaction, it is anticipated that the event will be held again in 1975 and may become an annual affair.

The 100th anniversary of the Society presents unique opportunities for publicity this year. A thirty-second public service announcement for television has been produced and distributed to all stations in the State. This announcement calls attention to the 100 years of service doctors have provided the citizens of Arkansas. Two significant events are planned for the general public, as well as Society members, at the 1975 Annual Session.

A centennial celebration parade will be held in downtown Hot Springs during the meeting honoring the medical profession's contributions to the State, and special historical medical exhibits will be open to the public during the session.

The Society continued sponsorship of the Cooperative Extension Service's Health Sciences division competitions at the 4-H O'Ramias. Physician representatives of the Society were on hand to present trophies to the district and State winners of the competition.

Mr. McIntosh has been involved with the formation of the "Arkansas Alliance for the Eradication of Venereal Disease", a volunteer coalition of community leaders from over the State interested in combating the VD problem. The Alliance, operating out of the Health Department, provides high quality educational materials and speakers on VD to communities and organizations wishing them.

Mr. McIntosh also has continued the Society's policy of calling on as many component county medical societies as possible during this year.

The Public Relations Committee and the Society have endorsed a weekly public health television series, MEDIX, sponsored by the Burroughs Wellcome Company. The Emmy Award winning thirty-minute series, produced by the Los Angeles County Medical Society, is designed to be aired on public service time provided by the stations in the State.

The Committee has met twice during the past year and will continue to meet as the need arises. Suggestions from members of the Society are welcome as to this committee's activities.

Committee on Insurance

Harry Hayes, Jr., M.D., Chairman

The major thrust of the Committee on Insurance

during this year was to keep open the lines of communication between the Society-endorsed malpractice carrier, the St. Paul Fire and Marine Insurance Company, and the Council of the Society. There were many meetings with and without the State Insurance Commissioner. The issue was finally settled when the Commissioner granted an increase in the premium rate of approximately 40.8%. This issue has settled down at the moment. This Committee understands that at least part of the reason that St. Paul has remained in business here in Arkansas is that the agents who write the insurance for the individual doctors accepted a reduction in the usual commission charged for writing this type of policy. This Committee continues to receive discouraging news from other states and also on the national scene. An effort by the Society attorney to get some malpractice arbitration in the Legislature was warmly received by the membership at the Winter Meeting.

The Insurance Committee has received with interest a report from at least two agencies in Little Rock that Arkansas physicians may now elect to set aside fees obtained from the treatment of Medicaid recipients in Arkansas into a retirement pension fund. As this report was being prepared, details of these plans were just being made available.

The Committee continues to receive individual complaints from physicians in regard to the handling of claims by individual insurance companies. It is of interest that this past year the American Medical Association has brought forth another standard insurance claim form which, although probably not the final answer, is, or will be, accepted by the majority of insurance companies writing health coverage.

This Committee did recommend and obtain Council approval to encourage Arkansas physicians to utilize the CPT system in coding procedural claims. Arkansas Blue Cross-Blue Shield has indicated that they hope to ultimately adopt this system which is now in use by most of the commercial companies and which is now required for reporting Medicaid claims.

The Committee will continue to work toward even wider adoption of the CPT system and standard health insurance claim forms and sincerely hopes that the malpractice situation in Arkansas will now remain stable.

**Report of the
Committee on Medicine and Religion
Ken Lilly, M.D., Chairman**

The Committee on Medicine and Religion met during the winter meeting with a few of the members present.

A review of the past activities of the Committee was carried out. It was decided not to pursue the prayer breakfast which was initiated last year. The Committee will try to enlist the interest of several ministers in the Little Rock area to meet with us at its next meeting in hopes of furthering our joint relationships with the ministers. It was unfortunate that during this year, the AMA found it necessary to discontinue its Department of Medicine and Religion because of lack of funds and Arne Larson will no longer be available to us for consultation.

There are no recommendations from this Committee to the Society for the annual meeting.

**Physician-Nurse Joint Practice Committee
Robert Watson, M.D., Chairman**

During the last half of 1974 and up to the present time, the Physician-Nurse Joint Practice Committee has met regularly each month.

Up to this date, most of our attention has been directed toward examination of roles and functions in medical and nursing practice. Definition of authority, responsibility and operation of each profession has been discussed, together with innumerable medico-legal potentialities.

Numerous gray areas of authority and responsibility prevail at this time. Presently, such terms as "nurse practitioner," "physician's assistant," or "physician's extender," are freely used, but all, as yet, are terms without legal definition.

The effectiveness of this Committee is seriously impaired until such time as our State Legislature gives legal definition, authority and function to these numerous paramedical categories.

**Student AMA Liaison Committee
Alfred Kahn, Jr., M.D., Chairman**

A meeting was held on Sunday, November 24, 1974, between the Liaison Committee of the Arkansas Medical Society and representatives of the Student American Medical Association. They included the following: Barger, Heinemann, Arthur, McCrary, Mabry, Braswell, Tvedten, Honeycutt, and Kahn.

The meeting included a number of points.

First of all, the members of the Student Ameri-

can Medical Association wanted to know if there was some way that the basic science examination could be done away with. They felt that the test had several objections. One of the principal objections to the test was that it was redundant inasmuch as during the course of their examinations upon completing medical school, a similar test had to be taken. Another objection was that the test did not really discriminate an individual's knowledge. A discussion was held about this test and it was explained that the test was originally instituted in an effort to prevent individuals who did not have proper medical training from practicing medicine in Arkansas. It was further explained that the test was not an effort to exclude well qualified young physicians from the practice of medicine; furthermore, if a change was made, it was pointed out that there might have to be some legislative approval of the change. A point of considerable importance was whether or not other qualifying tests given by national organizations could be taken by someone who was not properly qualified by an approved medical school. The matter, of course, was left open inasmuch as neither committee could make a decision. However, it was the very strong wish of the members of the Student American Medical Association that only one test involving basic science could be used at the end of their senior year. It is felt that this recommendation should be taken up by the Arkansas Medical Society.

Another discussion concerned the expansion of the Freshman Class at the University of Arkansas Medical Center to 170 people. It was felt that if there was not a very considerable expansion in the hospital facilities at the University of Arkansas School of Medicine and if there was not a considerable expansion in the teachers in the University of Arkansas School of Medicine, the program could not be effectively carried out. Another interesting point was that someone questioned whether or not 170 highly qualified Arkansas students could be obtained. The general tenor of this discussion indicated that the Student American Medical Association was very concerned that unless additional beds for true didactic teaching by well qualified teachers was available, the quality of the medical students would fall despite efforts to educate medical students at the private hospitals around the State.

There was a discussion concerning research at the Medical Center. Views were expressed pro and con as to whether or not research should have an equal place in an institution, such as the University of Arkansas School of Medicine, with teaching. One opinion was expressed that research sapped teaching time. Another opposing view was expressed that research attracted attention to the Medical School and, in this matter, attracted money which enabled the Medical School to expand both its physical plant and its faculty. A third view was expressed that teaching and research were entwined in the medical profession and that it was not really possible to make any hard and fast rules.

Another point of discussion was how the Medical Center might attract more teaching patients. Various opinions were expressed about this. No consensus was arrived at.

The members of the Student American Medical Association stated they enjoyed the rotation through hospitals outside of the Medical Center but felt that it was most important that enough didactic first-rate teaching was given while they were in these hospitals. This brought up some discussion as to the role of part-time teachers and full-time teachers in the Medical Center.

There was a brief discussion as to whether or not medical students should be conscripted and sent to small communities whether they wished to or not in return for partial payment of their expenses in medical school. It was felt that this was not a good plan by most of the members of the Student American Medical Association.

The admission policy to the University of Arkansas School of Medicine was discussed that the Admissions Committee should be a broader based committee consisting of not only academically oriented individuals but also physicians who were in private practice. One suggestion was made that the Admission Committee should even include lay people, including people from various walks of life outside of medicine. The main thrust of this discussion was that the physicians or teachers who were purely in basic science were not necessarily the best qualified individuals to pick the successful applicants for our Medical School. A minority opinion was that it would be wise to simply put the applying students on a computer and let the computer pick the best qualified students.

Lastly, a discussion was held concerning MECO. This project was one designed to try to enable students to get jobs in small community hospitals. The main idea was that the student who became acquainted in a small town and with a small hospital might later go back to practice there. MECO needs money to help place approximately six students; there are thirty-two applicants among the Freshman Class but there are only six definite openings at this time.

This meeting was an unqualified success and your Liaison Committee of the Arkansas Medical Society feels that these meetings should be continued. The members of the committee further feel that the suggestions of the students should be given careful scrutiny and action wherever possible by the Arkansas Medical Society and by the University of Arkansas School of Medicine.

This report is respectfully submitted for the Liaison Committee of the Arkansas Medical Society.

Medical School Committee

Ross Fowler, M.D., Chairman

The Medical School Committee of the Arkansas Medical Society met November 24, 1974, with the heads of departments of the Medical School.

The accomplishment of the Family Practice Program being a Department in the Medical School, along with the responsibility of the Arkansas Medical School in supplying primary care, health, manpower and quality care in rural Arkansas was discussed.

It is stated that even today, in some of the most prestigious medical schools, students have no opportunity to observe family practice. Other schools may offer only electives or put all the family practice teaching off campus so that it is almost invisible to most students and faculty members and is symbolically not a part of the medical school.

The Family Practice Department has the second largest number of residents in the resident training program in the Arkansas Medical Center but has no beds allocated to the Department in the Center.

The Committee recommends that office space in the new building that is to be constructed include office space for the Family Practice Program and that bed space in the present Medical Center that has never been opened up with beds be opened up and designated as beds for the Family Practice Department.

The Family Practice Department has made excellent progress, but it is thought that, with more assistance from the excellent faculty and facilities of the Medical Center, it can be more constructive to the health needs of Arkansas.

The discrimination against the patient and the physician by the Arkansas Five Area Medicare Fee Schedule was discussed and considered very unfair, as well as a detriment to obtaining rural physicians. Support from the entire Medical Society is needed and requested to correct this inequity.

Report of the Ad Hoc Committee on Repeal or Amendment of PSRO

Ken Lilly, M.D., Chairman

This Committee met three times during the year. There was good interest on the part of committee members and good attendance at committee meetings.

A considerable amount of research was done and a plan was adopted to try to effect some amendment of the PSRO law. Most of the members had decided that total repeal of the PSRO law probably was not feasible. We developed a plan to first inform the physicians as to what the deleterious effects of the Public Law 92-603 were. And, in doing so, sent a question and answer sheet to each member of the Society, along with the PSRO portion of the above-mentioned law. The next step is to inform the patients of the effects and what it will mean to them in obtaining their medical care. The next step will be to ask the aid of our legislative members in affecting the amendment of the PSRO law.

All recommendations that were appropriate to act on were made to the Council following each meeting and there are no new actions to be presented at the annual meeting.

**Report of the
Medical Services Review Committee**
Charles F. Wilkins, Jr., M.D., Chairman

This Committee (formerly known as the Professional Services Review Organization) continues to meet monthly at the Arkansas Blue Cross-Blue Shield Building. As the principal peer review mechanism of the Arkansas Medical Society in matters related to Medicare, Champus, and Blue Cross-Blue Shield UCR, it continues to consider claims, utilization, and quality of care cases. Its twenty-three family practitioners and specialists

serve in an advisory capacity to the Medical Director of Blue Cross-Blue Shield. It is contemplated that during the coming year, some of its activities will be assumed by the Professional Standards Review Organization of the Arkansas Foundation for Medical Care; however, it will continue to be active in those areas not covered by the PSRO.

**First Councilor District Professional
Relations Committee**
F. E. Utley, M.D., Chairman

There was only one complaint submitted to the Professional Relations Committee of the First Councilor District during this past year. To my knowledge, this matter was settled satisfactorily between both parties.

**Fourth Councilor District Professional
Relations Committee**
Sanford C. Monroe, M.D., Chairman

In the year 1974, two cases were referred to this Committee for investigation, consideration and action.

One problem involved the medical care of inmates at the Cummins State Prison, especially that of the treatment and problems of an individual inmate. This was presented in the form of a letter to the State Medical Society. The information in the letter was thoroughly reviewed with Dr. George Smiley, who, at that time, was the prison physician. It was learned that the complaints were, on the whole, false and greatly exaggerated. No definitive action was deserved or taken. Dr. Smiley suggested that the Society take a strong and continued interest in the prisons. He further suggested that a committee named by the Society, with official status by appointment of the Governor, would be of benefit to the prisons. Their responsibility would encompass regular visits to the prisons for the purpose of evaluation of the medical care of inmates, and recommendations related thereto.

The second case presented to the Committee was by letter from the mother of an obstetrical case who was under the care of a Pine Bluff obstetrician. The patient had been dismissed by the physician during her pregnancy. The mother claimed that this was done without her knowledge and was unfair to the patient. She also felt that, because of such, a possible relationship to a premature labor and delivery might have resulted. This case was thoroughly reviewed

with the physician and the mother that made the complaint. It was found that the physician acted in a moral, ethical and legal manner, and he properly arranged for her care. A conference with the mother, at which time she learned more about the situation which she had not known before, resolved the misunderstanding. No further action is considered necessary.

Addendum to Annual Report

At the time of submission of the above report, Dr. Monroe asked that he be relieved of the position of chairman of the district professional relations committee. He has served as chairman for many years and he feels that the burden of the committee work is on the chairman because the three committee members are from different towns. He suggested that the county medical societies assume this responsibility and include a grievance committee in their committee structure. A State Review Authority could then act on cases referred at the request of the county society. The Council of the Society directed that Dr. Monroe's comments be submitted for consideration of the reference committee.

Eighth Councilor District Professional Relations Committee

Richard M. Logue, M.D., Chairman

I am happy to report that the matters which have been presented to the Professional Relations Committee have been resolved without complication. There have been few matters for this Committee to consider and I am again impressed with the rapport of the Medical Society members with the public and with each other.

Ninth Councilor District Professional Relations Committee

Ross Fowler, M.D., Chairman

The question of whether or not it is ethical for otolaryngologists to fit ear pieces and to supply and service hearing aids was requested of the Committee.

It was the Committee's opinion that it is ethical as long as the patient is not exploited.

A complaint of excessive pre-marital examination charges is being investigated at the present time.

Tenth Councilor District Professional Relations Committee

Charles F. Wilkins, Jr., M.D., Chairman

The Committee, consisting of three members, Dr. Sam Landrum of Fort Smith, Dr. Boyce West

of Clarksville, and the chairman, has received, reviewed, and made disposition of several cases during the past year. Most have been patient complaints against physician services or fees. In almost all cases, there is either a lack of understanding or a lack of communication. The primary duty of this Committee has been to open lines of communication.

Report of the First Councilor District

John B. Kirkley, M.D., Councilor

Looking back over this past year, I have very little to report. I let the local county societies know that I would be available for speaking engagements in order to acquaint them with the work of the Council or what the Council was thinking about at the state level, and have received no invitations. There must be a more aggressive method of doing this that might be pursued in the future.

One of the requisites for the councilors now following the State meeting is to have a district meeting. This suggestion had been made previously at a Council meeting in the fall of 1972. Being somewhat new at the game, and full of energy, I planned a meeting for Jonesboro in January or February of 1973, with a program that was of general interest to all physicians in that it had to do with cardiac rehabilitation. The usual announcement was sent to all members in the First Councilor District by the State Office. A total of five physicians or so registered for the meeting. Only three were from Jonesboro proper, one was from Walnut Ridge, and Dr. Fairley came from Osceola. In view of the fantastic turnout for this meeting, I am absolutely adamant against having another meeting unless I can be assured of at least ten people showing up.

I have managed to attend all the Council meetings of the past year, but must admit that the amount of work done in the district itself has been rather poor.

Report of the Second Councilor District

Paul Gray, M.D., Councilor

The main objective for this district was the notification by telephone in November 1974, to four members of the House of Delegates and six of the county officers reminding them to attend the Winter Meeting of the Arkansas Medical Society, Sunday, November 24, 1974. Of those

notified, all but one were present at the meeting. Members of the local Medical Society were notified by telephone, which included five other towns in this district. Of this number, three of them were present. They were also reminded to have their reports of the Constitution in by the first of the year for each county.

There is being planned the usual February Second District Meeting which will probably be held at Searcy the latter part of February.

The President of the Society, Dr. Ben Saltzman, was in Batesville for the December meeting.

The surrounding counties were notified to be present as part of their county duties.

**Report of the
Third Councilor District**

L. J. Patrick Bell, M.D., Councilor
Fred C. Inman, Jr., M.D., Councilor

Again, an effort has been made to stimulate interest in organized medicine to attend the State meetings and to become involved in the various places implemented. Members were contacted to attend these sessions and requested to stimulate the delegates to be present.

We hope that, in the future, a regular district meeting will develop from its embryonic state. It will take full cooperation of all members in the district.

**Report of the
Fifth Councilor District**

J. B. Jameson, M.D., Councilor
John H. Moore, M.D., Councilor

Activities in the Fifth Councilor District seem to be concentrated in Union and Ouachita Counties. Dallas, Bradley and Columbia Counties reported no unusual activities. Dr. John Alexander of Magnolia and Dr. Wayne Elliott of El Dorado are working on committees formulating parameters for Arkansas Medical Foundation implementation of the PSRO.

Ouachita and Union Hospitals are organizing to collect data to utilize Blue Cross-Blue Shield's program for quality control. Warner Brown is utilizing MAPPS for quality evaluation.

El Dorado is one of three areas in the State to begin operation of an Area Health Education Center and library. This is in conjunction with the University of Arkansas Department of Medicine and involves rotation of residents and interns from the University of Arkansas to El Dorado. An internal medicine consultant holds a

noon conference twice weekly and a tuberculosis conference monthly.

Ouachita Hospital has been involved in long range planning, utilizing various health planning consultants. A group of doctors, in cooperation with the hospital board, have been procuring various house staff members from the University Medical Center to assure around the clock emergency room coverage on the weekends.

The Ouachita County Medical Society has endorsed the Blue Cross-Blue Shield's Health Maintenance Program which will be the second in the State and is patterned after the pilot program instituted in Crittenden County.

The annual meeting of the district was well attended in El Dorado on January 15, 1975. A program on learning disorders in children was presented by Dr. Harold Levy. A dinner meeting and subsequent annual business meeting were held at the El Dorado Country Club.

**Report of the
Eighth Councilor District**
W. Payton Kolb, M.D., Councilor

As a project of the Society's Blood Bank Committee, a series of educational pamphlets on the use of blood components was mailed to all members of the Society in an effort to alleviate the problem of blood shortages.

Took action to request that the State Medical Board's Attorney investigate lay organizations which were providing medical examinations for life insurance applicants.

Invited the Director of Medical Services, Arkansas Social Service Division, to speak at a membership meeting on the provisions and problems of the Medicaid Program.

Approved a resolution seeking the repeal of PSRO Legislation.

Provided two scholarships for the Aldersgate Medical Camp for children.

Provided two scholarships, one for an individual and one for an organization, in connection with the annual Red Cross Blood Drive at the University of Arkansas at Little Rock.

Endorsed the Arkansas Foundation For Medical Care as the PSRO Organization for Arkansas.

Approved a request that the Society's Exchange provide answering service for the Arkansas Academy of Family Physicians.

Continued studies of alternate plans of health care delivery in the community through the Medical Economics Committee.

Approved the plans of the Pulaski County Health Department to inaugurate a clinic for the medically indigent in the county.

Amended the Society's By-Laws to provide a Courtesy Membership in the Society for local medical students.

Through the efforts of the Society's Committee on Liaison with the University of Arkansas Medical Center, conducted a study of the program of the School of Nursing.

Named a member of the Society as a representative to serve with a newly formed organization to study the medical needs of residents of eastern and central areas of Little Rock.

Invited representatives of local hospital administrations to meet jointly with the Society to hear a program on quality control by a member of the Joint Commission on Accreditation of Hospitals.

Approved and supported a plan by the Society's Auxiliary to conduct a potpourri sale, the profits from which would support the Auxiliary's community service programs.

Report of the Ninth Councilor District

Henry V. Kirby, M.D., Councilor

There have been two meetings in which members of the whole Ninth Councilor District were invited. One was held at Dogpatch, at which time PSRO was discussed, but no official district business was enacted. Prior to the election, the politicians were invited to give their views before the Washington County and Benton County Medical Societies in a joint meeting, and members of the Ninth Councilor District were invited. At this time, a business meeting was held of the Ninth Councilor District. Meeting was at Fayetteville.

There seems to be a great gap between the eastern portion and the western portion. When the meeting was at Dogpatch, one member from the western portion attended. The similar situation prevailed when the meeting was at Fayetteville. One from Harrison was there. Right now, it seems futile to try to have district meetings.

Report of the Ninth Councilor District

Morriss M. Henry, M.D., Councilor

The Ninth Councilor District meeting was held on May 11, 1974. Dr. Mahlon Maris of Harrison was elected president of the Councilor

District Society and Noel Ferguson was elected secretary-treasurer.

A luncheon meeting was held with invitations issued to all candidates for national and state offices. Among those attending were former Governor Dale Bumpers; Bill Clinton, candidate for Congress; and other candidates for the Arkansas State Legislature and State offices. The candidates were given an opportunity to discuss their views on health care and new programs they were interested in sponsoring or endorsing.

Members attending the meeting felt that it was a very important session and they enjoyed the opportunity to visit with the candidates for office.

Report of the Tenth Councilor District C. C. Long, M.D., Councilor

Physicians of the Tenth Councilor District were invited dinner guests of the Sebastian County Medical Society for the District Meeting on February 11, 1975.

Dr. C. C. Long, Mr. Paul Schaefer, and Mr. Bob Waters presented a program on the activities of the Arkansas Foundation for Medical Care, since it was awarded a planning contract to develop plans for becoming the Professional Standards Review Organization for the State.

They also discussed the probable future designation of the AFMC as the Conditional Operational PSRO and the steps that have been taken to integrate the PSRO in utilization review activities with the Title 18 and 19 intermediaries.

Following the presentation, an extensive question and answer session concerning the proposed manner of implementation and operation of the utilization review mechanism was held.

Report of the Council C. C. Long, M.D., Chairman

The Council of the Arkansas Medical Society met on Sunday, September 15, 1974, at the Sam Peck Hotel in Little Rock and transacted the following business:

1. Appointed Robert Watson as chairman of the Physician-Nurse Joint Practice Committee.
2. Voted to advise the Neurosurgery Department at the Medical Center that the Society would not oppose offering training to an osteopathic physician.

3. Requested a recommendation from the Budget Committee before taking action on a proposal that the Society join Kansas and Oklahoma in a hospitality room at AMA meetings.
4. Approved travel expenses for a member of the Emergency Health Services Committee to attend a workshop in Atlanta.
5. Endorsed the Arkansas Heart Association's High Blood Pressure Screening and Follow-up Project.
6. Requested legal counsel to file a protest with the Insurance Commissioner against malpractice insurance rate increase proposed by St. Paul.
7. Set November 24th as the date for the winter meeting.
8. Approved Society sponsorship of an INTRAV South American air/sea cruise departing Little Rock January 2, 1975.
9. Upon hearing the recommendation of the Budget Committee, the Council voted to approve participation in hospitality suites at AMA meetings on an individual meeting basis rather than on an on-going basis.
10. Voted to join Oklahoma and Kansas in a hospitality suite at the AMA meeting in Portland December 1974.
11. Voted to approve actions taken July 21st by members of the Council as a "committee of the whole" wherein they voted:
 - A. to pass on to employees the payment made by the Government for their services in connection with the Arkansas Foundation for Medical Care work on PSRO;
 - B. to apply \$2,290 of the funds paid by the Government to the employee pension trust.
12. Voted to inform the State Board of Nursing and the State Board of Higher Education of the Society's support of establishing ADN nursing programs in every state-supported college and university.
13. Voted to endorse Blue Cross-Blue Shield's proposal to become the claims processor for the State Medicaid and Medically-Needy Programs.
14. Heard reports on the progress of the Society's protest against malpractice insurance rate increases.
15. Voted to endorse a Poison Control, Drug Information Center and Toxicology Laboratory services program sponsored by the Emergency Medical Services System of Arkansas.
16. Requested that samples of the transcripts of the tapes for the Tel-Med program be presented to the Council for its review.
17. Voted to accept an increased premium for the Blue Cross-Blue Shield major medical coverage and requested that the major medical coverage be increased to \$250,000.
18. At the request of the committee to oppose PSRO, the Council voted to send a copy of the law to each member with an attachment prepared by the committee outlining the deleterious effects of the law.
19. Appointed Kemal Kutait as the alternate representative for the Medicaid Pharmacy Peer Review Committee.
20. Approved plans by Annual Session Committee Chairman, Robert McCrary, for the centennial meeting of the AMS.
21. Approved a proposed study on spinal cord injuries by the Arkansas League for Nursing.
22. Approved Society co-sponsoring a Physician Recruitment Fair at the Medical Center.
23. Approved the drafting of a new abortion law to conform with the most recent Supreme Court decision.
24. Moved to get the annual Society scientific meeting approved for the AMA Recognition Award and referred the problem to the Committee on Medical Education.
25. Voted to present a plaque of appreciation to Georgia Lee Tucker, who recently retired as Executive Director of the Arkansas State Licensed Practical Nurses' Association.
26. Approved a donation of \$500 to the Arkansas Political Education Committee.
27. Approved the general outline for the winter meeting and authorized the Executive Committee to select a speaker for the luncheon.
28. Declined to take action on a request from a congressman that the Society participate financially in a reception at Pleasant Valley Country Club honoring the new president of the U. S. Jaycees.

The Council met on Sunday, November 24, 1974, at the Downtown Holiday Inn in Little Rock and transacted the following business:

1. Upon hearing a report of the Centennial Committee, the Council approved expendi-

ture of up to \$1,500 for the production of television spots calling attention to the Centennial year of the Arkansas Medical Society.

2. Approved the following Executive Committee actions:
 - A. After receiving notification that St. Paul Insurance Company would not renew malpractice liability insurance after December 31, 1974, directed that other insurance companies be invited to discuss a group malpractice plan for the members.
 - B. Invited Insurance Commissioner Ark Monroe to speak at the winter meeting.
 - C. Decided to try to reach an agreement with St. Paul at the Insurance Commissioner's hearing on November 22nd.
3. Heard a report from Mr. Warren on the hearing held November 22nd on St. Paul's request for a rate increase. The Council voted to ask Mr. Warren to continue to try to reach an agreement with St. Paul which would protect the citizens of Arkansas from undue costs and would continue protection of the physician.
4. Approved a report outlining positions on legislation by Dr. Shuffield, Chairman of the Legislative Committee.
5. After hearing arguments by medical students for the discontinuance of the Healing Arts Board examination, the Council voted to recommend keeping the requirement for passing the examination.
6. Voted to recommend that physicians and hospitals adopt the AMA "Current Procedural Terminology".
7. Approved the Society sponsoring a chartered tour to the Balkans as proposed by the International Travel Advisors, Inc.
8. Decided to attempt to have Arkansas Medical Society educational programs accredited so that physicians could receive credit on their continuing education programs under any re-licensure provisions adopted in the future.
9. Voted to request the committee to oppose PSRO to submit material to be mailed out to members for approval prior to distribution.
10. Voted to discontinue the Committee on Emergency Health Services.
11. Voted to approve an agreement whereby

Medical Society employees would reimburse the Society for personal use of Society-owned automobiles.

12. Adopted a resolution of appreciation for the work of Mrs. Louis K. Hundley.
13. Voted to continue the policy of inviting representatives of other organizations to Council meetings when the business to come before the Council seemed to recommend the presence of the other associations' representatives.
14. Directed the Arkansas Medical Society delegates to AMA to oppose the suggested AMA dues increase at the meeting in Portland.
15. Voted not to approve a motion for the Arkansas delegates to vote for the reinstatement of the AMA Council on Mental Health.

The Council met on Sunday, February 2, 1975, at the Camelot Inn in Little Rock and transacted the following business:

1. Voted to protest the maximum allowable cost type regulations for prescription drugs under Federal health programs.
2. Reappointed Wayne Taylor of Jonesboro to the Medicaid Drug Utilization Review Committee for the Northeast District.
3. Appointed George Roberson of Pine Bluff to the Fourth Councilor District Professional Relations Committee.
4. Heard the Chairman of the Legislative Committee, Elvin Shuffield, discuss legislative items affecting medicine before the Arkansas Assembly:
 - A. Opposed a measure to have the Medical School Admissions Board appointed by the Governor. The Council suggested that the Medical School should continue to retain control of the Admissions Board and encouraged it to continue present trends of development of the committee.
 - B. Voted to oppose the Health Maintenance Organization bill as submitted by the Insurance Commissioner but to support an amended version as proposed by Mr. Warren.
 - C. Voted to amend the Healing Arts regulations to allow a physician with ten or more years of practice in another area to practice in Arkansas without taking the healing arts examination.
 - D. Voted to support a bill to provide protection to members of professional review

- committees against suits for libel.
 - E. Opposed a bill to provide for appointment of one layman to every professional board.
 - F. Voted to support a bill to require reporting of malpractice claims to the Commissioner.
 - G. Supported a bill to provide for creation of a medical malpractice commission designed to cut down the cost of malpractice insurance.
 - H. Voted to amend the Medical Practices Act to eliminate the Duffy Amendment.
 - I. Voted to support a bill to provide for creation of physical facilities for doing out-patient surgery.
 - J. Voted to urge physicians to encourage support of an increased budget for the Medical Center.
5. Decided to appoint a special committee to study Public Law 93-641, the Health and Manpower Resources Act of 1974, and to work with the Governor's office on implementation in Arkansas.
 6. Directed Chairman Long to appoint a committee to meet with the Governor for the purpose of discussing ways in which the State Board of Health can become more viable in the operation of the Health Department.
 7. Voted to request the Society committee on liaison with the Rehabilitation Service to work with the Service relating to problems of payment of fees.
 8. Approved a plan for the Society's continuing medical education accreditation program which had been prepared by the committee for submission to the Council on Medical Education of the AMA.
 9. Voted to discontinue the practice of hosting a luncheon for senior medical students at the annual session meeting.
 10. Received information on a proposed change in professional liability coverage offered by St. Paul.
 11. Voted to endorse Burroughs Wellcome's program of offering the MEDIX film series to television stations in the State.
 12. Moved to encourage members of the Society to contact the Governor and/or his aides recommending appointment of Mrs. Charles

F. Wilkins of Russellville to the Constitutional Convention.

13. Approved Executive Committee action authorizing entertainment expenses for Mr. Warren in connection with his work with the Legislature.
14. Approved including fringe benefits in the employee's retirement plan on the same formula used in connection with employees' salaries. Agreed to protect retired employees from further deterioration of their already-reduced incomes by annually adjusting the amount of retirement benefits by the amount of the increase or decrease in the consumer price index published by the Bureau of Labor statistics.
15. Voted to increase Mr. Warren's annual retainer.
16. Approved and adopted the budget as presented by the Budget Committee and modified it to include the increase approved for Mr. Warren.

Report of the Executive Vice President Mr. Paul C. Schaefer

1974 was another year of crisis. Malpractice insurance and PSRO occupied a great part of the time of the headquarters office and especially of the Executive Vice President. A good headquarters organization and excellent personnel made it possible for the Executive Vice President to attend the non-postponable demands of these two new problems. The malpractice problem, once thought to be settled, has been revived in the form of "claims made" policies to be put into effect June 30th. The PSRO, which was originally to have been in operation by January 1st, is still delayed as of February 12th due to inability of the Government to finance the operation.

The Executive Vice President wishes to publicly express his appreciation to the following employees without whose efficient, dedicated efforts, the great increase in responsibilities assumed by the headquarters office would not have been possible: Miss Leah Richmond, Assistant Executive Vice President; Mr. John T. McIntosh, Assistant to the Executive Vice President; Miss Dorothy Thompson, secretary; Mrs. Peggie Branham, Mrs. Pat Andrews, and Miss Becky Bautts.

In the field of PSRO, the preparations for the assumption of that responsibility would not have been possible without the dedicated efforts

of Dr. C. C. Long, who is in charge of the development of an organization to operate the new program.

In State legislation, as of the middle of February, the efforts of Dr. Shuffield and Mr. Warren have been rewarded with 100% success, both in preventing bad legislation and in passing good laws.

The Executive Vice President and his staff are proud to be associated with an organization which accomplishes so much, year after year, for its members.

Budget Committee

H. W. Thomas, M.D., Chairman

The Budget Committee submitted the following budget for 1975. The complete budget, as presented to the Council, is available to any member for his inspection at his request.

INCOME

<i>Budget Item</i>	<i>1975 Budget</i>	
Membership Dues	\$180,000.00	
Journal Advertising		
Local	\$13,000.00	
National	21,000.00	34,000.00
Booth Income		7,100.00
Annual Session Income		1,800.00
AMA Reimbursement		2,000.00
Miscellaneous & Rosters		450.00
Interest on Government Securities		11,000.00
Retirement (Employee contribution)		1,020.00
Specialty Desk		750.00
Intrav		2,160.00
Ark. Foundation for Medical Care		31,000.00
		<hr/>
		\$271,280.00

EXPENSES

Salaries		
Society	\$78,486.00	
Public Relations	11,365.00	
Journal	14,350.00	
Exhibits	500.00	\$104,701.00
Travel & Convention		
Society	18,000.00	
Public Relations	4,000.00	
Journal	500.00	22,500.00
Taxes		
Society	4,525.00	
Journal	775.00	
Exhibits	700.00	6,000.00
Retirement		
Society	25,754.00	
Journal	3,512.00	29,266.00

Stationery & Printing		
Society	2,265.00	
Public Relations	50.00	
Journal	310.00	
Exhibits	75.00	2,700.00
Office Supplies & Expense		
Society	5,325.00	
Public Relations	25.00	
Journal	850.00	6,200.00
Telephone & Telegraph		
Society	2,940.00	
Public Relations	500.00	
Journal	245.00	
Exhibits	15.00	3,700.00
Rent		
Society	5,280.00	
Journal	720.00	6,000.00
Postage		
Society	9,550.00	
Public Relations	50.00	
Journal	1,650.00	
Exhibits	50.00	11,300.00
Insurance & Bonds		
Society	4,750.00	
Journal	850.00	5,600.00
Auditing		
Society	700.00	
Journal	100.00	800.00
Council Expense		500.00
Journal Printing		30,000.00
Annual Session		
Society	9,900.00	
Exhibits	2,100.00	12,000.00
Winter Meeting		1,300.00
Dues & Subscriptions		
Society	7,850.00	
Journal	400.00	8,250.00
Gifts & Contributions		
Society	1,225.00	
Journal	25.00	1,250.00
Woman's Auxiliary		1,200.00
Legal Services		
Society	5,780.00	
Journal	720.00	6,500.00
Special Committee		
Society	150.00	
Public Relations	150.00	300.00
Rural Health		500.00
Miscellaneous		40.00
Freight & Express		
Society	12.50	
Journal	12.50	25.00

Office Equipment	5,000.00
Centennial	10,000.00

	\$275,632.00

**Report of AMA Meeting
December 1-4, 1974**

Portland, Oregon

Purcell Smith, Jr., M.D., Delegate

A mandatory, special assessment of \$60 for AMA members was approved by the House of Delegates at the 28th Clinical Convention in Portland. The assessment, effective January 1, 1975, for AMA members, excluding students, interns, and residents, is expected to improve immediate cash-flow problems and help build up depleted financial reserves. Rejecting a \$90 dues increase proposed by the Board of Trustees, delegates instead called for a Special Committee of the House to study the dues issue and report back to the 1975 annual meeting.

PRESENTATION OF AWARDS

The Benjamin Rush Bicentennial Award was presented to Dr. Robert Parker, a pediatrician from Montgomery, Alabama; the Distinguished Service Award was presented to Dr. William Willard, Dean of the College of Community Health Sciences at the University of Alabama; the Layman Citation was awarded to Harry Schwartz, Ph.D., author of *The Case for American Medicine*; a Special Award for Distinguished Service was presented to Dr. Ernest Howard, Executive Vice-President on leave from the AMA, who will retire March 1; and a Commendation Resolution was presented to Mr. Leo E. Brown, Assistant to the Executive Vice-President of the AMA, who is retiring after 25 years service with the AMA.

REPORT OF THE AMA PRESIDENT

Dr. Malcolm Todd told the delegates that the price of defending medical freedom can be high, but that the price must be paid. He also pointed out that medicine's freedom and, hence, its professionalism are threatened. Chief among the threats are various legislative proposals which would impose a compulsory national health insurance system, make health care a public utility, and require indentured service in medical education. Dr. Todd made a strong appeal for support of a proposed \$90 dues increase, emphasizing that it was impossible for the AMA to be any stronger than its finances would allow. He indicated that

while he personally believed that advertising played a useful role in drug education, he urged careful consideration as to whether advertising should be banned from AMA publications due to the possible charge that the AMA would be influenced by such advertising revenue.

**SUMMARY OF ACTIONS OF THE HOUSE
OF DELEGATES**

I. ASSOCIATION AND INTERNAL MATTERS OF THE HOUSE:

AMA Finances and Related Matters—In assessing a mandatory \$60 special assessment effective January 1, 1975, the delegates acted to strengthen AMA finances. The Association had operated at a deficit for four of the last five years and finances in 1974 were adversely affected by inflationary pressures.

The question of a dues increase was referred to a Special Committee of the House to be appointed by the Speaker. The Committee will make a comprehensive study of the AMA's financial priorities and capabilities, and report to the House at the 1975 Annual Meeting.

In related actions, the House strongly urged the Board of Trustees to restore in a "holding pattern" the structure of several councils and committees which were to have been eliminated, and to maintain present publication schedules for JAMA, all specialty journals, and Prism. The House also approved advertising as a legitimate function in AMA publications, and urged that the present full and unrestricted advertising program in AMA publications continue pending further study and a report at the June meeting.

Housestaff Participation in AMA—The delegates adopted several recommendations designed to strengthen housestaff participation in the AMA. They include: that the elected Executive Committee of the Intern and Resident Business Session assume advisory responsibilities of the Committee on Housestaff Affairs, which will be dissolved; that programs and priorities of the Department of Housestaff Affairs be developed annually by the department director and the chairman of the I & R Business Session, subject to review and approval of the Board of Trustees; and that responsibility for the editorial content of the Housestaff Newsletter and for the distribution of I & R Business Session reports be exercised by the Session's Executive Committee subject to appropriate approval and review in keeping with Association policies.

Professional Liability—During a discussion of malpractice problems, the House adopted a recommendation calling for the Board to give “priority attention” to providing legal counsel and advice to AMA members and state societies in the event their professional liability insurance is not renewed. The House also emphasized the necessity for state associations to seek legislative remedies for malpractice problems, and directed that the AMA continue to cooperate with the Medical Liability Commission.

Clinical/Scientific Meetings Format Changed—A separation of the fall business meetings of the House and the scientific meetings will be permitted beginning in 1977. The House will hold its fall meeting separately in cities recommended by the Board and selected by the House, and the scientific session will hold regional meetings at other times during the year deemed necessary by the Board and at cities selected by the Board. The scientific assemblies will continue to be held in conjunction with Annual Meetings.

In other actions on internal matters, the House: called for a definitive report at the 1975 annual meeting of AMA activities and programs related to PSRO; rejected a Board of Trustees proposal to replace the Council on Legislation and many functions of the AMPAC Board of Directors with a new Council on Public Affairs; referred a report on direct representation in the House of Medical Specialty Societies back to the Council on Constitution and By-Laws for further consideration; and adopted a by-laws change permitting past vice-presidents of the AMA to become ex-officio members of the House (without voting privileges or reimbursement for meeting expenses).

II. PHYSICIANS AND HOSPITALS AND MEDICAL SCHOOLS:

Due Process—The House adopted several recommendations which reaffirm the rights of all physicians, including housestaff and medical students, to due process. In related actions, the House adopted as AMA policy the proposition that a student's academic records should be open to inspection so that he or she may profit educationally; and referred back to the Judicial Council for further study a report involving three cases of alleged violation of due process at the local level.

Guidelines for Housestaff Contracts—The

House adopted a set of revised guidelines for housestaff contracts.

Biomedical Research—The House adopted a ten-point statement on biomedical research urging more federal funding with fewer restrictions. Prepared by the Board, the report sharply criticizes federal cuts in independent research grants and in the budgets of the National Institutes of Health. The report urges that more unrestricted grants be awarded for research; that NIH be given more independence in establishing budget and research priorities; and that appropriations for biomedical research should be in proportion to other health-related spending.

Continuing Competence of Physicians—Delegates also adopted a Board report calling for strong programs of continuing medical education and peer review as alternatives to relicensure since “the difficulties inherent in relicensure clearly outweigh any potential benefits”.

Specific recommendations include all possible encouragement and support for the AMA, constituent societies, JCAH and other bodies in expanding CME programs; that the AMA give high priority to enhancing and reviewing effective methods of continuing competence; that patient satisfaction should be included in performance evaluation; and that well-designed peer review programs be endorsed as an important component of performance evaluation. The House also stressed that evaluation of performance, rather than knowledge per se, is the best method of appraising competence in patient care.

In other actions related to physicians and hospitals and medical schools, the House: adopted an amended resolution which urges that duplication of local peer review procedures be avoided; that medical audit or utilization protocols used in screening be limited to those which are demonstrated to be valid, reliable and which do not add needlessly to cost; and that when local peer review groups recognize that a hospital medical staff has adequate medical audit and utilization procedures, that fact should be recognized by governmental agencies and JCAH; adopted a Board report detailing legally-approved methods for the exchange of information between and among medical societies and hospitals concerning a physician's hospital privileges or practice; and requested that a “comprehensive report” be presented at the 1975 Annual

Meeting on questions and issues related to foreign medical graduates.

III. PHYSICIANS AND THE GOVERNMENT:

National Health Insurance—Delegates gave the Board of Trustees a vote of confidence for its efforts to develop new approaches to NHI which maintain traditional AMA goals. The House adopted a Board report containing basic guidelines for NHI deliberations. The guidelines include minimum federal involvement in the administration of any NHI program; state jurisdiction for licensure of physicians and regulation of insurance; no Social Security tax financing and administration of any program; funding through federal revenues, state revenues, and private funds including employer-employee contributions for private health insurance; comprehensive coverage for basic and catastrophic needs; and the maintenance of pluralism in health delivery.

Manpower and Planning Bills—The House adopted an emergency resolution expressing unanimous opposition to U. S. House of Representatives' bills which would divide the nation into health service planning areas and treat health care as a public utility, and which would require medical students to reimburse the government for capitation. The resolution was unanimously adopted on Wednesday, December 4, and its substance presented to House Speaker Carl Albert and other Congressmen.

Prepaid Plans and Bonuses—Delegates adopted a Judicial Council report which cautions that the payment of bonuses to physicians in prepaid health care plans such as HMO's for minimizing the utilization of services may interfere with the physician's obligation to his patients.

In other actions related to physicians and the government (and third parties), the House: objected to language in insurance letters indicating the claims were "not medically necessary", since this encourages patients to decline to pay for services and is defamatory to physicians; urged that Medicare intermediaries adhere strictly to regulations for reimbursement of chiropractors to those procedures defined in regulations; encouraged the acceptance and use by physicians of the AMA's Uniform Health Insurance Claim Form, and urged insurers to study the possible use of plastic "charge card" type identification cards for imprinting basic data on insurance

forms; and urged the government to continue its present 55 m.p.h. speed limit for at least a one-year period, noting that traffic fatalities have declined 14.8% since the speed limit was imposed last year.

IV. PHYSICIANS AND THE PUBLIC:

Weight Reduction Clinics—The House took a strong policy position against the use of human chorionic gonadotropin in weight reduction programs.

Child Abuse—The House adopted a substitute resolution encouraging state medical associations to survey child abuse laws in their states, and recommend more desirable legislation where necessary.

Health Care for Disadvantaged—"Vigorous, high-priority" efforts to foster health care programs for disadvantaged segments of the population were recommended by the Delegates. The reference committee report noted that the Council on Medical Service will continue to develop and implement long-range strategies to improve health care for the poor. The House requested regular reports of progress made.

Maternity and Newborn Care—The House adopted two reports which reaffirm AMA policy to encourage insurance coverage of the newborn from the moment of birth, urge the health insurance industry to offer coverage for obstetrical care and any complications, and recommend that the insurance industry, as well as government, offer such coverage on the broadest possible basis.

In other actions relative to physicians and the public, the House: supported state legislation to regulate the practice of acupuncture. The new policy says acupuncture should only be performed in research settings by a physician or under the direct supervision of a physician.

Arkansas Political Action Committee

Kemal Kutait, M.D., Chairman

ARK-PAC had a very interesting year. We saw Mr. Mills return to Congress and saw Mr. Bumpers appoint a chiropractor to the State Health Planning Board.

We had a more pleasant side of 1974 politically. ARK-PAC was effective in helping Mr. Hammer-schmidt narrowly defeat his opponent to return to Congress from the Third District. We were involved in several races and although we were not always successful, as a group, we made some very good friends and, so far as we know, made

no enemies in our political involvement this past year.

Membership in ARK-PAC approached the four hundred mark which is not good but is better than it has been in the past.

The Board met both in person and by telephone and it is felt that the Council has made excellent selections for the ARK-PAC Board. They are interested, knowledgeable, and willing to sacrifice the time and effort necessary to do what needs to be done in behalf of the Medical Society through ARK-PAC.

As part of ARK-PAC's 1974 report, we are once again reminding each Medical Society member to send his 1975 dues in as soon as possible to help 1975 be a better year than 1974.

Report of the Arkansas State Medical Board January 1, 1974 - January 1, 1975

The Secretary of the Arkansas State Medical Board makes the following report of the activities of this board since the last meeting of the Arkansas Medical Society:

The officers and members are as follows:

Ross Fowler, M.D., President
H. Elvin Shuffield, M.D., Vice-President
Hugh R. Edwards, M.D.
Frank M. Burton, M.D.
John F. Guenthner, M.D.
George F. Wynne, M.D.
C. Stanley Applegate, Jr., M.D.
Bascom P. Raney, M.D.
Joe Verser, M.D., Secretary-Treasurer
Eugene R. Warren, Attorney

The board approved a motion to have the Chairman appoint a committee from the board to study and recommend proposed amendments to the Medical Practices Act requiring mandatory continuing education in order for physicians to be re-certified for licensure.

A yearly financial report of the board's activities prepared by Johnston, Freeman & Jones, C.P.A., was sent to and approved by the Council of the Arkansas Medical Society.

The board investigated every case of violation of the Medical Practices Act reported to the secretary during the year. Following is a summary of the board's proceedings.

Physicians registered for 1974:

Resident2,071
Non-Resident1,521

Physicians licensed by examination	119
Physicians licensed by reciprocity	72
Physicians certified to other states	140
Licenses revoked for non-payment of annual registration fee	39
Licenses suspended for non-payment of annual registration fee	60
Number of physicians ordered to appear before the board for alleged violation of the Medical Practices Act or Con- trolled Drug Act	21
Licenses suspended for violation of the Medical Practices Act	3
Number of physicians reprimanded for violation of the Medical Practices Act	3
Number of physicians whose BNDD number ordered revoked for violation of Controlled Drug Act	2
Cases pending for violation of the Medical Practices Act	7

ARKANSAS STATE MEDICAL BOARD

Balance Sheet June 30, 1974

ASSETS			
Cash on hand		\$	6.00
Cash in banks—			
Bank of Weiner, Weiner, Arkansas			
Certificate of Deposit #362	\$ 8,553.71		
Certificate of Deposit #392	2,746.35		11,300.06
Bank of Harrisburg, Arkansas			
Checking account	\$45,806.17		
Certificate of Deposit #2298	12,999.70		
Certificate of Deposit	7,000.30		65,806.17
Office equipment			3,545.97
TOTAL ASSETS			\$80,658.20
LIABILITIES AND SURPLUS			
LIABILITIES			
Withholding and FICA taxes deducted and unpaid for the quarter ended June 30, 1974		\$	490.73
SURPLUS			
Balance at beginning of year	\$69,572.37		
Add: Excess of receipts over disbursements for year ended June 30, 1974 (Schedule 2)	\$10,655.00		
Less: Increase in payroll taxes withheld but not remitted at June 30, 1974	(59.90)	10,595.10	80,167.47
TOTAL LIABILITIES AND SURPLUS			\$80,658.20
Other office equipment fully depreciated		\$	2,200.00

Summary of Arkansas State Department of Health Activities

Rex C. Ramsay, Jr., M.D., Acting Director

The story of public health service in Arkansas begins in 1878 with the onset of a yellow fever epidemic. Although no funds were available for operation, medical men set up a State Board of Health that established quarantine regulations.

Two years later, with sporadic outbursts of yellow fever continuing, the State Legislature appropriated funds for two years and gave the Board legal authority. At the end of the two-year period, yellow fever vanished and so did the Board of Health.

During the next 16 years, there were no funds, no public health service—and no sanitation!

One day, the years of security were shaken. A mild epidemic of meningitis occurred and before it subsided, smallpox began to run rampant. In 1898, the Board was once again called to action and continued to operate through an outbreak of yellow fever in 1903.

Again, all was quiet. Beneath the surface, men and women were becoming concerned about the lack of adequate health management.

Many groups interested in protecting the health of the citizenry began to form. With the Rockefeller Foundation for Human Welfare leading the way, committees were formed throughout the Nation to study various health problems. A grant also was made available to States, providing there was a Board of Health. To satisfy this requirement, a temporary Board was appointed.

Forces were gathering in Arkansas to secure permanency for the Board. A giant step was taken when the Surgeon-General accepted an invitation to the meeting of the Arkansas Medical Society in 1912. The result of the meeting was that a resolution was adopted to ask the Legislature to pass a bill establishing a permanent Board of Health. The bill, Act 96, patterned after laws of Pennsylvania, Mississippi and New York, passed with minor opposition.

While Act 96 was resting in the Governor's office, another epidemic of smallpox sprang up. Citizens bombarded the Governor with letters protesting his lack of action. The bill then was signed and a Board of seven physicians appointed. This was the first Board with legal provision for its membership.

Since its passage, Act 96, 1913 has been

amended by Act 301, 1949; Act 186, 1959; Act 433, 1961; Act 240, 1963, and Act 204, 1971. These amendments have allowed for additions to the seven member Board of Health and the appointment of a Board Secretary who also would be the State Health Officer. Today, the Board of Health is composed of twelve members: seven physicians, a dentist, a registered nurse, a registered pharmacist, an engineer and a veterinarian. The Secretary does not have to be an actual Board member.

Act 96, 1913, which established the Board of Health, required the establishment of only two operating sections: the Bureau of Vital Statistics and a Hygienic Laboratory. These two areas are still operating today.

To enable public health services to further reach the populus, the Legislature passed Act 186, 1949. This Act provided for the establishment of County and District Health Departments and provided a legal basis for City, County and District Boards of Health and defined their relationship to the State Board of Health. Each of the "departments" was to have a health officer. There are now 82 City, County or District Health Departments, with full or part-time health officers.

Since 1913, there have been many Acts dealing with the health of the public passed by the General Assembly. These have required the establishment of additional "bureaus" and "divisions" and various laws which enabled them to operate as they now exist.

Act 38, 1971, officially changed the name of the organization from Arkansas State Board of Health to Arkansas State Department of Health. The Board of Health now acts in an advisory capacity and the Director of the Health Department is Secretary to the Board.

Since "official" status in 1913, Arkansas has developed its public health service under the guidance of six State Health Officers, with the seventh in office now.

The following is a current "directory" of the services of the Arkansas Department of Health:

BUREAU OF ADMINISTRATIVE SERVICES

Division of Public Health Education

Coordinates public relation activities of the Department through various programs, news releases and health articles. Assists in development, publishing and distribution of the Department's Annual Report, health publications and

brochures and the film catalog. Speakers and films are provided as a public service.

Bureau of Vital Statistics

Certificates of birth, death and fetal death are bound in indexed volumes as they are registered. A record also is maintained on marriages, divorces, legitimations and adoptions. Delayed and prior birth certificates also may be registered.

Division of Personnel

Personnel activities include compensation and classification plans, leave policies, standard recruiting procedures and training policies, and recruitment and coordination of all health personnel records.

Division of Accounting

The Division of Accounting is responsible for Accounting, Business Management and Data Processing activities.

Division of Local Health Services

Coordinates, directs and evaluates all programs, multi-services and functions of the bureaus and divisions that compose the bureau as well as City, County and District Health Departments. The Division Director also serves as Assistant to the State Health Officer.

Arkansas Drug Abuse Authority

Implementation and supervision of a comprehensive treatment and rehabilitation program; a central source of information and data collection regarding drug abuse; provide staff to assist State agencies or communities in applying for Federal or State funds and helps arrange for program consultation, seminars, workshops and other statewide training and technical assistance activities.

Southeast Regional Health Office— Monticello, Arkansas

The first regional health office in Arkansas was set up to provide more direct health service to the consumer (local level), and act as a liaison for the central office and the seven local health departments in the region.

BUREAU OF MEDICAL CARE SERVICES

Division of Chronic Disease Control

Provision of home health care for patients upon physician's request, diabetes screening and identification of hemolytic streptococcus. Detection of diseases in early stages and getting proper treatment to avoid complications and disability.

Collect and analyze data relating to morbidity and mortality of chronic diseases.

Medically indigent patients and suspects are referred to tumor clinics for diagnosis, treatment, limited hospitalization and domiciliary care.

Division of Communicable Diseases

Maintains surveillance of the incidence of infectious diseases and coordinates efforts of local agencies in preventable disease control; conducts investigations and recommends control measure procedures. Areas include immunization to strive to eradicate Diphtheria-Tetanus-Pertussis, polio, rubella, rubeola, and smallpox; venereal disease to strive to eradicate syphilis and control other venereal diseases; tuberculosis to strive to eliminate tuberculosis by treating individuals who are infected or may become infected and other communicable diseases.

Division of Public Health Nursing

Provides nursing service consultation, planning and supervision to public health nurses on the local level to implement programs related to other divisions of the Division of Local Health Services. Administration of Home Health Services provided by city/and or County Health Departments.

Division of Maternal and Child Health

Consultation and program development concerning the health of mothers and children in the areas of family planning, maternity care, midwife control, hearing and vision screening services, nutrition services, special services of the Handicapped Children's Center, and child health.

Family Planning and Maternity Clinics offer cancer screening, laboratory studies, prenatal and postpartum care, physical examinations, nursing and nutritional counseling.

The Handicapped Children's Center is a diagnostic counseling center for children handicapped in areas of mental retardation, speech and hearing.

Division of Dental Health

Provides consultation in dental programs of other agencies, encourages preventive dentistry measures, and coordinates activities with dental profession schools.

Division of Veterinary Public Health

Provides assistance to urban and rural communities in prevention, control, management

and suggestions for treatment of zoonotic diseases and disease conditions common to man and animal.

Establish and maintain a source of information on rabies in animal and man, with recommendations for methods and procedures for control.

Division of Meat Inspection

Provide health protection to consumers of meat and meat products from diseases transmissible by animal to man upon consumption of meat products that may have been contaminated or adulterated during processing, transportation or storage.

Ensure an acceptable degree of sanitation in exempt plants; provide continuous "truth in labeling"; provide laboratory services, and surveillance control of disposition of diseased, disabled, dying or dead animals.

Division of Emergency Health Services

Administration of standards of the Highway Safety Act as it pertains to ambulance personnel, equipment and supplies; develop emergency preparedness programs for time of disaster; coordinate aspects of the Hospital Reserve Disaster Inventory, Packaged Disaster Hospitals and Hospital Reserve Disaster Inventory, and conduction courses for "special" groups in the areas of Medical Self-Help and Cardiopulmonary Resuscitation.

BUREAU OF HEALTH FACILITY SERVICES

Division of Public Health Laboratories

Coordinate activities with physicians, hospitals, Department personnel and various laboratories in the diagnosis of diseases and in finding evidence of unsanitary conditions and health hazards through laboratory analyses.

The 21 operating units perform microbiological tests on milk, water and food; examine specimens for diagnosis; perform serological tests for syphilis, febrile diseases, bacterial, mycotic and viral infections; perform premarital blood testing and blood chemistry tests for communicable disease and maternity clinic patients, and evaluates performance of clinical laboratories.

Division of Hospitals and Nursing Homes

Administration of aspects of the Hill-Burton Program for construction of hospitals and health facilities; Federal Aid Programs for construction of community mental health centers and facilities for the mentally retarded; certifies hospitals,

home health agencies, extended care facilities, various laboratories and licenses and regulates hospitals and nursing homes, license nursing home administrators, and administer the Architectural Barrier's Law.

Administer tests and evaluate persons seeking a license; develop training courses and perform inspections on facilities where patients are confined.

BUREAU OF ENVIRONMENTAL HEALTH SERVICES

Division of Blood Alcohol

Utilizes installation of gas chromatographs which are alcohol specific and adapted for breath, blood and urine analyses to assist in the reduction of alcohol-related traffic incidents through the establishment of an approved statewide alcohol testing program.

Division of Radiological Health

License and regulate byproduct source, special nuclear material, natural and machine produced radioisotopes accompanied by surveillance and monitoring of radioactive materials in the environment.

Register and control X-ray machines.

Division of Occupational Health

Coordinate aspects of the Health Section of the Occupational Safety and Health Act in reference to health hazards to prevent, as far as possible, the occurrence of occupational diseases resulting from adverse exposure to harmful chemical and physical agents of an individual in the course of his employment.

Division of Poison Control

Activities related to poison prevention, accident reporting and environmental monitoring. Accident reporting includes development of a pesticide accident surveillance system involving several Federal, State and private agencies. Environmental monitoring involves collection of various samples to be analyzed for pesticide content.

Division of Pharmacy Service and Drug Control

Drug control is to provide a State level regulatory and surveillance program for all legitimate handlers of controlled substances and those areas where manufacture, wholesale, dispensing and patient administration activities occur.

Provide service by acting as a Destruction Center for unwanted, surrendered controlled sub-

stances by legitimate handlers; destruction service for law enforcement agencies and the Drug Abuse Laboratory.

Act as central office consultation and information service for County Health Departments about drugs, new drug products and other related inquiries, procurement of drugs, drug related items or patient oriented supplies.

Division of Environmental Services

The Division functions in the area of analytical chemistry services; operated in support of law enforcement agencies by performing drug sample identification and other Bureaus and Divisions of the Health Department by performing analysis of drinking water, meat and foods and environmental samples to determine compliance with regulations, including radio-chemical analysis and pesticide identification.

BUREAU OF CONSUMER PROTECTION SERVICES

Division of Environmental Engineering

Administrative responsibility for environmental health as it pertains to water, sewerage, vector control and industrial health.

Reviews plans for approval of sewer and municipal systems, mobile home parks, swimming pools and cemeteries; conducts examinations for waterworks licensing programs and issues permits for various compliance instances and provides educational and training courses.

FDA Contract Section

Work with Federal investigators in area of foods to consumer at terminal establishments; airports, train depots, bus stations, etc. Utilization of those concerned with complaints on food service, inspection of bakeries, etc.

Division of Plumbing

Promote adoption of plumbing codes by municipalities; test plumbing appliances, fixtures and materials; conduct research in sanitary plumbing; license journeymen and master plumbers, and review plans and specifications for plumbing installations.

Division of Mobile Homes Section

Administration of mobile homes standards as they relate to products purchased by the consumer; for the safety of the consumer.

Division of Food Services

Food Section

Provide services for food protection for consumers and carry out various aspects of the Food, Drug and Cosmetic Act. Review plans and specifications for various establishments; proposed labeling and advertising; food sampling and educational courses.

Milk and Dairy Section

Control aspects of production, processing and distribution of Grade "A" milk and dairy products and conduct sanitation ratings of milk sheds and efficiency surveys of milk control aides.

Assists in promotion and development of effective milk laboratory programs and reviews plans and specifications for milk operations.

Division of Vector Control and Recreation

The Division of Vector Control and Recreation has the responsibility of furnishing the people of Arkansas consulting services concerning arthropod and rodent vector biology; methods of control and information regarding types, strength and components of chemicals used in chemical vector control.

Also offered are surveys, upon request; inspections and testing of recreational facilities, emphasizing inventories of all public and private camps, parks and public use areas.

Another facet of the program concerns inspection and permitting of water craft which have or should have marine toilet devices.

Division of Sanitarian Services

Coordinate the duties of sanitarians in County Health Departments with all Divisions of the State Health Department to bring about better communication and direction between them.

Make surveys of all environmental public health areas; offer expert consultation in environmental public health areas; conduct routine environmental complaint inspections, routine sampling programs and aid in approval and selection of solid waste disposal sites.

Assist in coordination of emergency health services during times of disaster to insure safe wholesome foods and proper disposal of contaminated products.

In the past few years an "aura of cooperation" has developed between employees, local health

departments, other agencies and organizations, the general public, and the Legislature.

Although health programs have expanded at the rate of public demand, only in the past few years have budget and personnel come close to helping meet these demands. Even with a tight budget, health programs are of great benefit to all Arkansans, either directly or indirectly.

The Legislature has been generous enough to enable employment of a public health nurse for each county; the number of sanitarians has increased, although some counties are still without the services of a sanitarian on a daily basis; health education services and information have been expanded to "spread the word" (help people prevent health problems); family planning clinics, venereal disease clinics and immunization continue to increase; as have the rest of the Department's program.

One Regional Health Department is operational with several others in developmental stages.

Including the Regional Office at Monticello, there are 83 local level health departments staffed with approximately 1,200 employees. The Central Office housing nearly 500 of these employees is in Little Rock.

The Central Office building, dedicated in 1969, is already too cramped for the employees it houses and more people must be employed to carry out new and expanded programs for protection of our consumer public—Arkansas.

Medical Education Foundation for Arkansas

Robert Watson, M.D., President

The Medical Education Foundation for Arkansas was founded in 1962 for the broad purpose of supporting any worthy means of bettering medical education in this State. It is financed by a \$5 annual assessment from Society dues paid by each member of the Arkansas Medical Society. Supplemental income is received in the form of memorial donations and investment dividend income.

From the beginning, it has been the policy of the Board of Directors of MEFFA that we should, each year, "spend a little and save a little," hoping that, through prudent management, our invested funds would, in time, have an annual dividend income such that MEFFA could be a self-supporting venture and no longer

need financial supplements from the State Society.

Your Board of Directors is pleased to state that each year has shown continued steady progress along our basic planned schedule. Presently, this Foundation has \$50,000 invested in government pledged short-term securities. Income interest and memorial contributions for the past year amounted to slightly more than \$3,500, an amount available at this time to serve the purpose of bettering medical education in this State.

It is the request of this Board that it be permitted to continue to receive Medical Society support toward eventually becoming an independent program with sufficient investment-guaranteed income to provide support to any cause benefiting medical education in Arkansas.

Report of Arkansas Regional Medical Program

Ross Fowler, M.D.

Member of Regional Advisory Group

Although existing health planning programs expired June 30, 1974, the Arkansas Regional Medical Program has been very active in many health planning programs during the past year. Funding has been on a temporary basis since that time.

Work was done on functioning programs, revising existing health planning programs and revising programs for construction and modification of health care facilities during the year.

Health care areas are expected to be set up in the State with specifications that no area be less than 500,000 population or more than 3,000,000 population. Arkansas, with a population of about 2,000,000, could be divided into one, two or three areas. The ARMP recommends a one statewide service area be established similar to the statewide PSRO service area.

According to Federal specifications, no health service agency in Arkansas is eligible to serve as a State Health Planning and Development Agency. It will be necessary that a new State Agency be set up with 60% of its members being appointed by the Governor from the State Health System Agencies, and having a consumer majority.

ARMP is staffed and qualified to take an active part in any new health service in Arkansas. Its present status is uncertain.

April, 1975

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 71 No. 11

FORT SMITH, ARKANSAS

ARKANSAS MEDICAL SOCIETY
CENTENNIAL YEAR
ANNUAL SESSION
APRIL 20-23, 1975
ARLINGTON HOTEL, HOT SPRINGS

BECOTIN®
Vitamin B Complex

BECOTIN® with VITAMIN C
Vitamin B Complex with Vitamin C

BECOTIN®-T
Vitamin B Complex with Vitamin C, Therapeutic

MI-CEBRIN®
Vitamins-Minerals

MI-CEBRIN T®
Vitamin-Minerals Therapeutic

AND A WIDE VARIETY OF OTHER PHARMACEUTICALS



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Indianapolis, Indiana 46206

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MAY 6 1975

Both often



- Predominant psychoneurotic anxiety

- Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor

neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive dis-

orders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anti-convulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

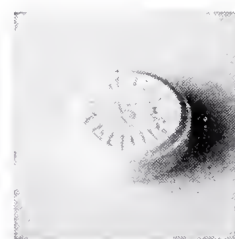
respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent

in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium[®] (diazepam) 2-mg, 5-mg, 10-mg tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child-bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle

spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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ALFRED KAHN, JR., M.D., Editor
1300 West Sixth Street Little Rock, Arkansas

MR. PAUL C. SCHAEFER, Business Manager
214 North 12th Street Fort Smith, Arkansas

LITTLE ROCK BUSINESS OFFICE
114 E. Second St. Little Rock, Arkansas

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The Medical School: 1974-75

Thomas A. Bruce, M.D.*

This is the 96th continuous year for medical student education in the University of Arkansas. The writer of the Book of Ecclesiastes must have been a medical student. "What has been is what will be," he said, "and what has been done is what will be done." (Eccl. 1.9) The form of a medical student's education is almost unchanged from that first year in 1879 — an acquaintance with the basic concepts of anatomy, pharmacology, and the like, with an opportunity for practical experience in medical diagnosis and therapy. The *content* of the curriculum is forever changing, of course. Students now are learning *functional* anatomy, *molecular* biology and *immunopathology*. An understanding of the metabolic and biophysical nature of disease is fundamental. And yet — the need to develop an ability to listen perceptively, observe with care, perfect manual skills, understand the patient as an individual and as a member of society, and to be able to manipulate these common tools to promote health or rehabilitate the patient from illness — these needs remain constant, generation after generation.

Student Body. The School of Medicine this year has 121 freshmen, 120 sophomores, 122 juniors and 105 seniors in the undergraduate medical program, 37 masters (M.S.) and 18 doctoral (Ph.D.) students in the graduate program, plus 214 interns and residents and 15 clinical research fellows in the postgraduate training program. This makes a total of 752 full-time trainees in the School. There are many crossovers: seven medical students are enrolled in advanced graduate courses, four graduate students are taking medical school courses related to their field of study, and many senior medical students serve as "acting" interns or residents; none of these crossovers are counted in the statistics. Students from other health schools (Nursing, Pharmacy, Health Related Professions) and practicing physicians

throughout Arkansas and the surrounding states take advantage of our educational programs on a part-time basis.

The Admissions Process. The policies for admitting medical students are standardized and have been approved by the University Board of Trustees. An Admissions Committee composed of twelve individuals is coordinated through the office of Dr. Robert Bowling, Assistant Dean for Admissions. Students are chosen in approximately equal numbers from the four congressional districts of the State, using five criteria: college grades, Medical College Aptitude Test (MCAT) scores, letters of evaluation and recommendation from premedical advisory faculty and friends, a psychological personality inventory, and an interview by members of the senior medical faculty. Each candidate is ranked on a 7-point acceptability scale by each member of the Admissions Committee, and the mean score is used to rank-order the candidates for admission.

1974-75 Medical School Applicants. For this year's freshman medical class there were 345 Arkansas applicants who met our minimum eligibility criteria. No applicants were seriously considered who were not State residents. A non-medical committee on the University campus at Fayetteville certifies whether resident status is justified for each of our applicants.

Thirty-five per cent of the qualified Arkansas applicants were admitted to the freshman class. The average grade point average for admission was 3.5 (where an A grade = 4.0 and a B grade = 3.0) and the average admission score on the MCAT was 575 (where the national mean for all participants is 500).

Characteristics of Medical Student Population. The origin of undergraduate medical students can be seen in Table I. Fifty-three students are female and fourteen students are black. Although the School is most anxious to recruit additional students from both these groups, legal

*Dean, University of Arkansas School of Medicine, 4301 West Markham, Little Rock, Arkansas 72205.

Table I.
Origins of Arkansas Undergraduate
Medical Students

Medical School Class	Towns With 6000 People or Less	Towns of Intermediate Size*	"Big 3" Metropolitan Areas — Little Rock, Fort Smith, Pine Bluff
Freshmen	35	52	34
Sophomores	34	59	27
Juniors	24	56	32
Seniors	24	52	29

*While the official home address is listed in the town, a number of students may live outside the city limits in rural areas.

requirements prevent our lowering admissions standards or setting "quotas" to achieve this goal. About a third of our female and black applicants are selected for admission, same as for the white male applicants. Attrition of medical students for academic causes over the past two years has dropped significantly due to remedial programs. Only two students per year have been dropped for class failure during this time.

Graduate Students. The distribution of students in the graduate program in the School of Medicine is shown in Table II. Most of these students will proceed into academic teaching and research careers.

Postgraduate Students. The distribution of interns and residents in the School of Medicine is shown in Table III. This group of trainees require much more attention, since they are the direct source of physicians for the towns in Arkansas which need doctors. Medical students who go outside the State for internship and residency only rarely return to practice in the State. This has been the primary reason for establishing the Area Health Education Centers (AHEC) pro-

Table II.
Distribution of School of Medicine
Graduate Students

Discipline	Master's Degree Candidates	Ph.D. Degree Candidates
Anatomy	2 (2)*	1
Biochemistry	6 (3)	7
Microbiology & Immunology	4	5
Pharmacology	9 (1)	2
Toxicology	5	1
Physiology	6 (1)	2
Pathology	5	0

*Numbers in parenthesis are medical undergraduate students, i.e., in Anatomy two of the four Master's degree candidates are freshman medical students.

Table III.
Distribution of Postgraduate Trainees
in the School of Medicine

Department or Division	Intern	Resident Year 1	Resident Year 2	Resident Year 3	Resident Year 4	Fellows
Anesthesiology		1				1
Dermatology		2	3	2		
Family & Comm. Medicine	10*	8	14	3		
Medicine	10	14	10	4		14
Neurology		2	2	1		
Neurosurgery		1	1	1	1	
Nuclear Medicine			1			
Obstetrics & Gynecology	3	3	2	3		
Ophthalmology		4	3	4	2	
Orthopaedic Surgery		5	3	3		
Otolaryngology			2	2	3	
Pathology			1	1	4	
Pediatrics	5	4	5			
Psychiatry	2**	2	2	2		
Radiology		7	6	3		
Surgery	2	8	3	5	1	1
Urology		2	2	2	1	
Rotating Interns	16					

*Ten senior medical students have elected to take their entire fourth year of training in the F & CM residency.

**Psychology interns.

gram . . . to provide additional residency training positions directly in the regions where additional doctors are most needed.

Faculty. The overall caliber of the teaching faculty is perhaps the best in the Midwestern United States. The numbers of faculty in certain areas, particularly those teaching in the basic clinical clerkships, are entirely too small. Table IV lists the numbers of full-time faculty receiving all or most of their salary from the University.* Those faculty with full-time academic rank, but paid primarily from other sources, such as the Veterans Administration or State Health Department, are not included.

Governance. The basic organizational unit of the School is the department, and all faculty are assigned to one or more departments. Three major Councils harness the numerous and diverse activities of the faculty and students into one School of Medicine: the Council of Departmental

*The University salary is derived from State funds, Federal grants and contracts, endowments, and professional fees income. The average State government contribution is only about 40% of the total salary.

Chairmen (CDC), the Council for Academic Affairs (CAA), and the Research Council (RC). The 16 department heads who comprise the CDC have the responsibility for organizing and carrying out the programs of the School. The faculty, student and housestaff members of the CAA are elected by their peers and serve as the School's planning body ("think tank") for educational activities. The RC serves as the faculty watchdog to preserve a minimum of free time for

creative and individual scholarly endeavor. One of the penalties of having a small faculty is that these valuable periods for research and development progressively become eliminated, and the overall School becomes excessively plebian and mundane (better faculty also tend to move to other schools).

The CDC and CAA each elect four members to serve as the School of Medicine Executive Committee, to advise the Dean on all policy issues, promotions, or other sensitive matters. Numerous committees exist within the faculty and the student body to monitor and make recommendations for specific improvements in Medical School affairs.

The Deans of the four health Schools, and the Hospital Director report directly to Dr. James L. Dennis, Vice President for Health Sciences, who serves as the chief executive officer of the University Medical Center. Dr. Dennis is responsible to President Charles E. Bishop and the Board of Trustees of the University.

Physical Facilities. The 313 bed University Hospital is woefully inadequate for the expanded number of students and trainees. The 227 students and 210 resident physicians who are full-time this year on the patient wards are stacked on top of one another. The Veterans Administration and Arkansas Children's Hospitals are used to full capacity as extensions of the clinical teaching services. Several teaching programs are located at the Baptist Hospital and at the St. Vincent Infirmary. Dozens of students take elective clinical experiences outside Little Rock in the AHEC's and in preceptorships with practitioners throughout the State.

A new student classroom-laboratory building is just beginning construction in the Medical Center and is planned to be ready for use in the fall of 1977. That building should provide the added space to accept an additional 50 students per class, and we will need to begin the search for additional faculty soon in order to teach the expanded classes.

An Ambulatory Teaching Center is in active planning now that state funds have been appropriated for construction. The use of non-hospitalized patients for teaching is particularly important as the School broadens its training in comprehensive team care, preventive care (personalized health education) and rehabilitation.

Table IV.
Distribution of Faculty in the
School of Medicine

Department	Instructor	Asst. Prof.	Assoc. Prof.	Professor
Anatomy	1	3	3	4
Biochemistry	(2)*	2 (2)	4	1
Biometry (Div.)		1	1	1
Microbiology & Immunology	1	3	1	1
Pathology ¹		5 (3)	1	1 (1)
Pharmacology	1	3	2	4
Physiology	1	2	2	2
Anesthesiology	1	1 (1)	2	1
Family & Comm. Medicine		5		1
Medicine ²	2	7	4	6
Neurology (Div.)	2			1
Obstetrics & Gynecology		4	1	1 (1)
Ophthalmology		3		1
Orthopaedic Surgery			1	1
Pediatrics ³	(1)	2 (2)	6 (1)	3 (1)
Psychiatry ⁴	9	5	7	4
Radiology ⁵	1	11	2	2
Surgery ⁶	1	4	4	3

*The number in parenthesis indicates the number of faculty committed to special contractual obligations, i.e., two Instructors in Biochemistry have salaries dependent totally on research grants.

FOOTNOTES

1. Pathology has three faculty in Clinical Pathology, four faculty on contract with the National Center for Toxicologic Research, and four faculty in Anatomic Pathology.
2. Medicine has all its faculty teaching general internal medicine, but there are the following subspecialty interests: four faculty in cardiology, four in nephrology-transplantation, three in hematology-oncology, three in endocrinology-metabolism, two in infectious diseases and one each in respirology, rheumatology and gastroenterology.
3. Pediatrics contracts five faculty for Child Health Services through the Children & Youth Project of the State Health Dept. and has active subspecialty teaching programs similar to those in the Dept. of Medicine, but with additional programs in Ambulatory Care, Neonatology and Genetics.
4. Psychiatry has sixteen faculty in the Child and Adolescent Division (eleven of whom are in disciplines of social work and psychology) and ten faculty in the Adult Division.
5. Radiology contracts all radiographic professional services for the Veteran's Administration Hospital. There are eight faculty in the Diagnostic Division, three in the Radiation Oncology Division and five in the Nuclear Medicine Division.
6. Surgery has five faculty in General Surgery (including Thoracic, Cardiovascular, Head & Neck disciplines), three in the Neurosurgery Division, two in the Otolaryngology Division and two in the Urology Division.

Plans for the Future. The Medical School must address itself more efficiently to meeting its three primary missions: 1) It must produce the number and types of physicians needed to provide excellent medical care for the people of this state, and it must participate cooperatively with the Medical Society and with community groups to locate its graduates in areas of greatest need. 2) It must continue to build and develop as a sophisticated academic health center in order to provide consultative services to physicians as needed and to offer unique and highly technical services to the citizens of Arkansas when they are not otherwise available. 3) It must search for new answers to the old, old problems — probe, distill, prune and weigh all the new facts — and it must make them available to the medical profession at large.

Needs to Fulfill the Missions. Most of all the School needs the support and understanding of its friends and alumni. During the past five years the entire Medical Center has blossomed under strong state and institutional leadership; many ardent supporters throughout the State have been instrumental in bringing about this upturn. Particular credit should be extended to the members of the Caduceus Club, with the ever-present leadership of Mrs. Louis Hundley, Executive Secretary and gracious hostess. Without that continued support we shall flounder.

Just as an army travels on its stomach, so a state institution travels on its legislative appropriations. Although the state provides only about 40% of the School's total operating funds, this core support is absolutely critical if we are to obtain the faculty, equipment and other resources to obtain matching funds and keep abreast of the scientific world. The period of national inflation has increased operational costs so much that a ten percent increase in base support will only maintain our present program in a functionally adequate state. We urgently need supplemental appropriations to expand the

Family Practice and other primary medical education programs that demand immediate attention.

In the long run the need for additional clinical teaching facilities will be the biggest dilemma. If this is accompanied by establishing teaching services in community hospitals around the State, support faculty and educational facilities will be needed to guarantee that these are bona fide learning experiences. In order to turn out larger numbers of doctors, quality *cannot* be sacrificed. Rather than grind out dozens more inadequately prepared physicians it would be easier and cheaper to move in trainloads of foreign-trained doctors or physician assistants. No, the quality, caliber and integrity of the medical profession is its most precious asset and all of us must fight to the end to preserve it!

Conclusion. Never in history has the medical profession found itself in an environment where things are changing so rapidly and with such import. The technologic advances, the upsurge in our understanding of the nature of disease and how to modify it, the changing economic base for providing medical care, public demands for quality assurance, recertification and perhaps even relicensure — these events, among others, are potential causes of turmoil and dismay. The University of Arkansas School of Medicine pledges itself to join hands with the practicing medical community in finding workable solutions to these events. Let us resolve to maintain our leadership role in solving the health problems of this State. Let us together seek to uphold the traditions of the profession by not only providing care for the sick, the dying and the dead in an exemplary manner, but hope and encouragement for those who need it so badly.

This report has provided an update on the Medical School's students, faculty and programs, and a personal view of our directions and needs for the future.



Initial Management of Newborn Infants

H. Gordon Green, M.D., M.P.H.*

We have come a long way since the days when a woman paused in her labors to give birth to her child, then resumed working in the fields. Progress is reflected in an ever decreasing neonatal mortality rate.¹ In spite of advances in medical science, however, some children still get into trouble. Some of these problems are preventable; others may be alleviated but not cured, while still others seem hopeless.

The purpose of this paper is to review some of the current knowledge and practices in the management of newborn infants. No attempt will be made to be exhaustive or overly technical. We hope to present a very practical and useful approach that may be of some help to the physician.

Of course, the first steps in management of newborn infants begin during pregnancy. A history of a problem pregnancy will alert the physician to the possibility of problems in the newborn, so that proper preparations must be made. Those preparations might include the providing of an isolette in the case of a premature infant, or they might include immediate presence of or referral to a specialist in problems of the newborn. The physician's attentiveness in obtaining the history of the pregnancy, as well as the information obtained during the course of labor, will be reflected in the ease with which problems are managed. Certainly, the unexpected difficulties, with their attendant confusion, are less to be desired than the prepared handling of newborn difficulties. Examples of anticipated problems might be erythroblastosis fetalis, pre-eclampsia, and placenta previa.

For the perfectly normal infant, there are certain principles and practices which will be of great help during the first hours of life. For instance, an important need of the newborn baby is *warmth*. As shown by Oliver² and others, the maintaining of a normal temperature is most important. The old practice of dipping a newborn baby in ice water to stimulate respiration is to be deplored, and even the holding of an infant up into the air allows important body heat to be

lost by radiation and evaporation. Hypothermia, to any degree, is detrimental to the infant's well being, since low temperature gives rise to increased oxygen needs, decreased intra-arterial oxygen tension, an increased metabolic rate with subsequent lactic acidosis and exhaustion of glucose stores, and general vasoconstriction. Therefore, to cut down heat loss, we suggest drying an infant quickly with a towel, preferably one which has been warmed. Various devices for receiving the newborn infant are equipped with warming mechanisms, and if you have a radiant heat device attached to the receiving cradle, so much the better. Any source of warmth will do, even if it is nothing more than the enveloping arms and breasts of an ample and loving nurse. It is important that this warmth be maintained throughout the first hours of life, whether in a nursery or, in the event of a transfer, in other facilities; the receiving facility may find it difficult to deal with an infant who is hypothermic and therefore, in a state of resistant acidosis. Hyperthermia is equally to be avoided, since it can provoke apnea. The term "neutrothermal environment" best describes the desired state of minimal metabolic demands and thus, optimal outcome. In general, we recommend suctioning of the mouth and then the nose immediately after birth, using a soft-tipped rubber bulb (ear syringe). Generally, the mouth should be cleared first, to avoid aspiration of amniotic fluids or mucus. Prolonged suctioning may cause reflex laryngeal spasm. Often, if a child is sluggish in establishing respiration, the very stimulation of drying with a warm towel or suctioning with the bulb will stimulate respiratory activity. If not, a brisk flicking of the bottom of the feet will usually result in crying respiration.

Most physicians find value in assessing in a fairly objective way the initial status of the baby. The Apgar score is widely used and has some prognostic value.³ This Apgar score may be assigned by a physician or a nurse who is familiar with newborn babies, and most people establish Apgar scores at 1 and 5 minutes of life. In figuring the Apgar score, the examiner may become aware of specific needs in the newborn baby with regard to oxygen, cardiac rate, or other difficul-

*From Arkansas Children's Hospital, Little Rock, Arkansas, and The Department of Pediatrics, University of Arkansas Medical Center, Little Rock, Arkansas.

ties. These problems should be addressed with the usual resuscitative measures. This might include assisting respiration by mouth-to-mouth, or with a positive pressure device such as the hope or ambu bag. In mild cases, this can be used with a mask, but if in doubt, it is possibly best to use an endotracheal tube placed by means of a laryngoscope. Training and practice are desirable if this technique is to be used. Cardiac massage may be performed in the tiniest of infants,⁴ remembering the very delicate nature of these individuals; it is customary to use two fingers with any newborn infant, depressing the sternum in its central portion approximately $\frac{3}{4}$ inch at a rate of 100 times a minute.

Oxygen may be required, and if it is not delivered by a bag, it may be delivered by the mouth of an attending physician. An 80% oxygen mix is preferable, since 100% oxygen tends to be rapidly absorbed and allows alveolar collapse and atelectasis. In addition, toxic effects of oxygen include pulmonary and ocular complications. Hours or days later, when respiratory distress and/or cyanosis are absent, room air may be sufficient.

Warmth and oxygen are the two most important elements in the management of a newborn baby. In addition to providing these two things in the delivery room and nursery, it is extremely important to continue providing them, particularly in the event of a transfer to another facility. As elementary as these two things may seem, it is always surprising to us to have babies transferred to our hospital without them.

A third very important aspect of neonatal health is the pH. Therefore, a third extremely important component of management may be the administration of sodium bicarbonate. A mild degree of acidosis is invariably present in a newborn baby, and the compromised baby almost certainly has it to a pathologic degree. While it is usually helpful to obtain a laboratory test for pH, in the event of illness in the baby, it is usually safe to assume that acidosis is present and to administer sodium bicarbonate on an empiric basis.⁵ We generally give sodium bicarbonate by means of a small plastic catheter inserted in the umbilical vein (identified by its flaccid wall and by its position at "twelve o'clock," considering the umbilical stump as a clock face) after proper cleansing with betadine

or other suitable material. Location of the catheter tip in the inferior vena cava is verified by x-rays. For the catheter, we have used a plastic infant feeding tube. For those not experienced in this technique, superficial veins in the scalp are usually readily available, and a scalp vein needle or other needle inserted into a peripheral vein is adequate. We give approximately 5 ml of sodium bicarbonate (1 meq per ml) as a slow intravenous push, and this is repeated at about 5 minutes of age if distress continues. Further administration of bicarbonate should be approached with caution, to avoid hypernatremia or alkalosis.

Unfortunately, if a newborn infant has continuing problems, it is almost inevitable that an intravenous method of delivering fluids and medications will need to be available. If the umbilical catheter is secured in place, this will serve admirably, and it may be connected to the usual intravenous fluids. Otherwise, another sort of method of delivering intravenous medication must be available. This is, of course, difficult to do under many circumstances, and perhaps that accounts for the general acidotic condition in which we often see referred patients. However, some effort should be made to deliver sodium bicarbonate and fluids. It is also important to be able to deliver glucose, since at times of stress, supplies of glucose and glycogen are rapidly exhausted with the increased metabolic rate.⁶ As a general rule for the first hours of life, one can give 30 ml per pound of 10% glucose in water per 24 hours, to be reduced if the infant is noted to be edematous. It may be helpful to add 5 ml sodium bicarbonate to 100 ml of the IV solution. After the first day of life, potassium and calcium are desirable additions. One other step in the delivery room should be mentioned. If the child is being adequately ventilated, air movement is heard on both sides of the thorax, and pallor is prominent, the possibility of hypovolemic shock must be entertained. Then, the umbilical catheter will be helpful as 10 ml per pound of O negative blood may be given. Low blood volume in the neonate may be defined as a hematocrit below 40 per cent.

Hemorrhagic disease of the newborn was a threat in nurseries until the ready availability of Vitamin K. It is routine in our nursery to give Vitamin K₁, one mg, intramuscularly to *all*

babies. This simple prophylactic step is unquestionably of value in preventing serious hemorrhagic disease.

If a baby is distressed, referral to a newborn intensive care center is desirable. However, the initial management of these infants is so important that the very best of care will be to no avail if the first minutes and hours of life are not managed optimally. Initial resuscitation, provision of warmth and oxygen, correction of acidosis, and intravenous fluids should be provided *prior* to transferring an infant. In addition, moisturized oxygen, warmth, additional sodium bicarbonate, and glucose solution by intravenous methods should be provided *during* the transportation process. Transport itself may be traumatic, so that it is imperative to stabilize the baby as much as possible and to provide these basic measures if the child is to have a fair chance.

There is no question that the first minutes of life have a great deal to do with the remaining years of life. An optimal start is a necessary, though not sufficient, measure of insuring a

normal, productive, rewarding lifetime. Without this good beginning, the infant's chances are greatly reduced. Attention to the infant's basic needs will therefore pay great dividends, both to the individual and to society. In this paper, we have not discussed esoteric, high-technology measures available in the newborn intensive care centers; rather we have outlined the minimum care that all babies should expect in this country at this time.

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ELECTROCARDIOGRAM

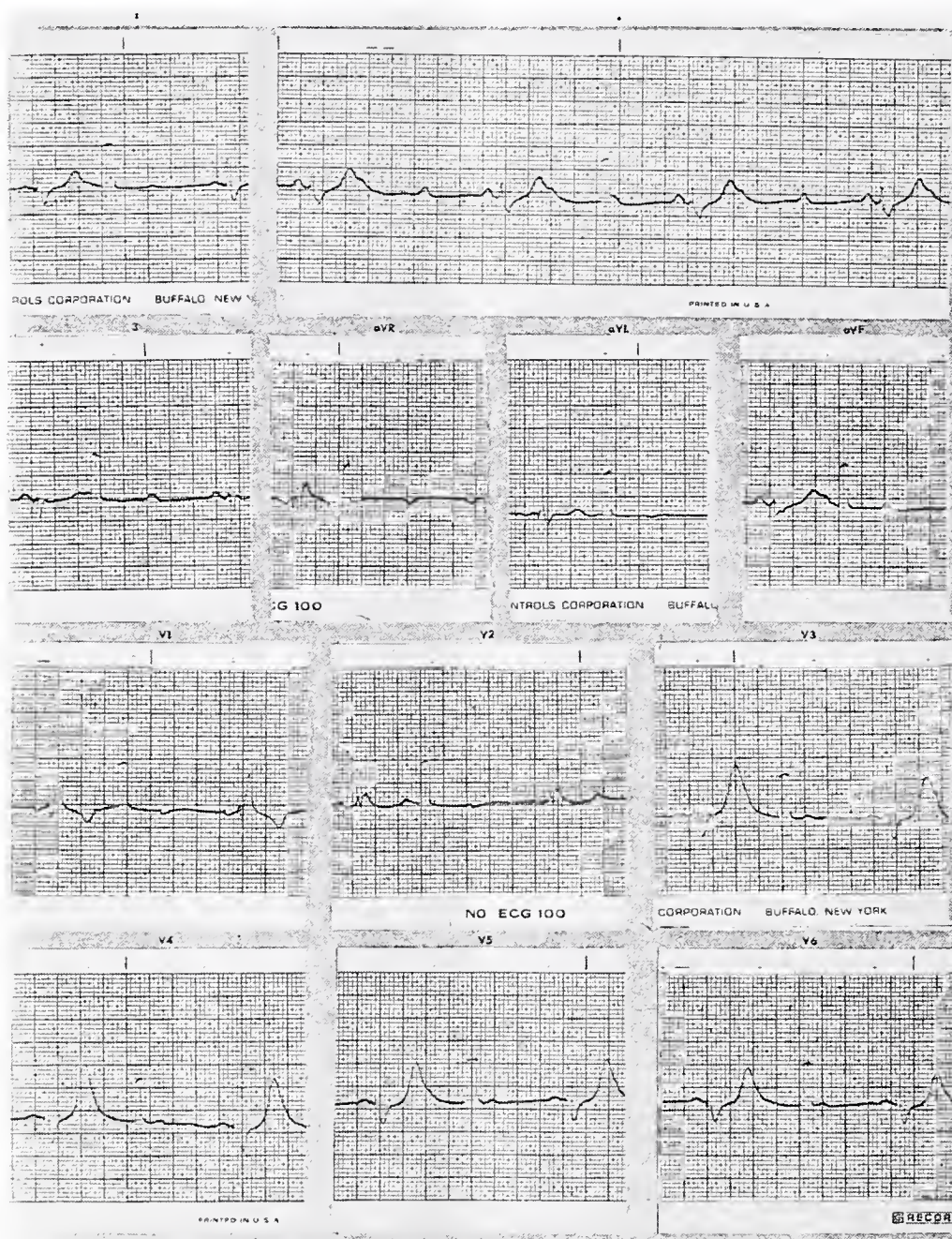


OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 389)

The patient is a 55-year-old male recently admitted to a hospital for episodic dizziness. The electrocardiogram shows:



R. T. Bulloch, M.D., Professor of Medicine
 Chief, Cardiology Division
 University of Arkansas Medical Center
 4301 West Markham
 Little Rock, Arkansas 72205

Office Orthopaedics

Scoliosis ("crooked" (Gr.) spine)*

H. Austin Grimes, M.D.*

This article is an attempt to simplify a sometimes confusing array of terms in regard to spinal curves. Generally, the earlier scoliosis is diagnosed and evaluated, the better for the patient.

When a curve is discovered by the parents, anxiety must be allayed when possible. This requires a fairly adequate understanding of the causes, treatment, and prognosis as with any condition requiring protracted observation and/or treatment.

The incidence of scoliosis is 2% in the population and is recognizable before 14 years of age. Females are affected five times as often as males, and there is no racial predilection.

In those cases of scoliosis which have a congenital origin, surely by the 16th week of gestation all the nerve, muscle, and ligament anomalies can affect spinal growth. Many congenital anomalies may go unnoticed until a rapid growth spurt at 6 years of age. There are genetic factors associated with some spinal curves, i.e., muscular dystrophy, osteogenesis imperfecta, Marfan's syndrome, neurofibromatosis, and vertebral anomalies.

EXAMINATION

The initial examination clinically should establish the shoulders and pelvis are level and a plumb line dropped from C-7 cervical prominens bisects the glutei. (Fig. 1 & 5) Lateral bending to the right and left helps establish ability to correct curves or determine which is the primary curve (fixed) and the compensatory curve (flexible). Double primary curves occur and even

cervical curves occur which further complicate treatment to be mentioned later.

When practicable, lifting the patient by the head, better done by an assistant grasping chin and occiput, allows some straightening of the compensatory curve or curves.

Leg length measurement is performed recumbent from ASIS to the tip of the medial malleoli. In a short leg deformity leveling of the pelvis is done with wooden blocks in 1/4 inch increments

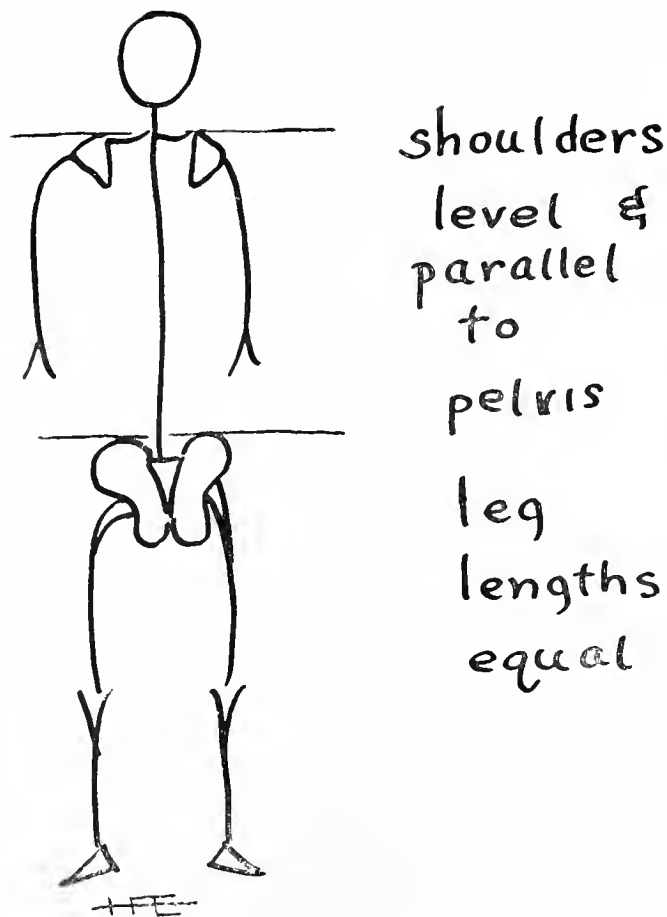


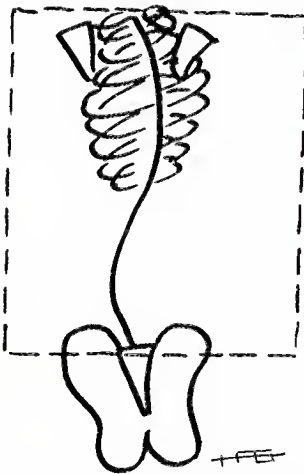
FIG. 1

*Little Rock Orthopedic Clinic, P.A., Post Office Box 5270, Little Rock, Arkansas 72205.

or centimeters, if you prefer. Plumb line measurement helps determine prognosis in that uncompensated cases are prone to become worse and indicate an urgent need for institution of some form of appropriate treatment. (Fig. 5 & 6) In the thoracic curves rib deformities often give a "razorback" bump, clinically emphasized by having the patient face the examiner and bend forward. (Fig. 4)

RADIOGRAPHIC EXAMINATION

If no more than a casual evaluation of the scoliosis is performed on the initial visit then one view may suffice. (Fig. 2) More detailed information is obtained by four or five additional views as shown by Figure 8. Structural scoliosis is characterized on x-rays by wedging and rotation of the vertebral bodies and adjacent discs. Measurement of the primary and compensatory curves is most often done by the Cobb Method which is a line drawn horizontal to the bottom of the last vertebral body involved in the curve to the top of the uppermost involved vertebra. (Fig. 9) A perpendicular line to each of these lines is then inscribed outside the vertebral shadows, so as not to obscure bony detail, and the angle is measured with a goniometer and recorded. Note that the shaded ovals (facets) are located in varying planes in respect to the spinous process indicating rota-



FIRST XRAY ON
14 X 17 FILM TO
INCLUDE ILIAC CRESTS
UP AS HIGH ON
THE STANDING PATIENT
AS POSSIBLE

FIG. 2

tion. X-rays are done every three to six months with clinical evaluation according to the priorities of the examiner.

CLASSIFICATION

There are two major divisions *Postural* (or functional) accounting for two-thirds of the scoli-

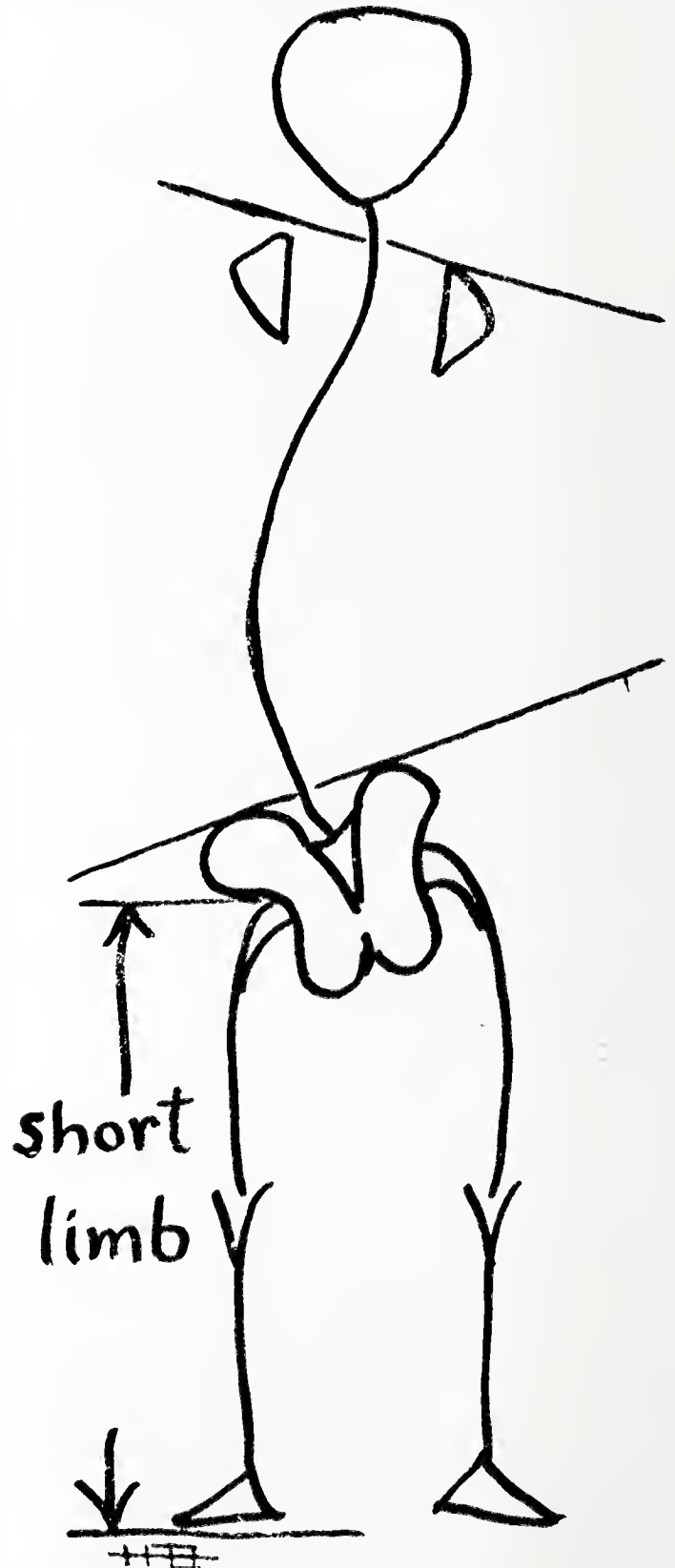
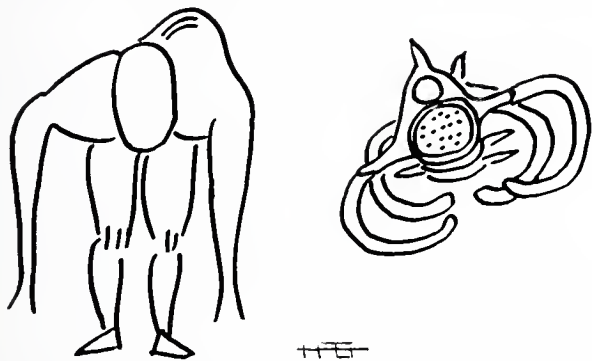


FIG. 3

oses diagnosed and *Structural* ($\frac{1}{3}$) which is subdivided into:

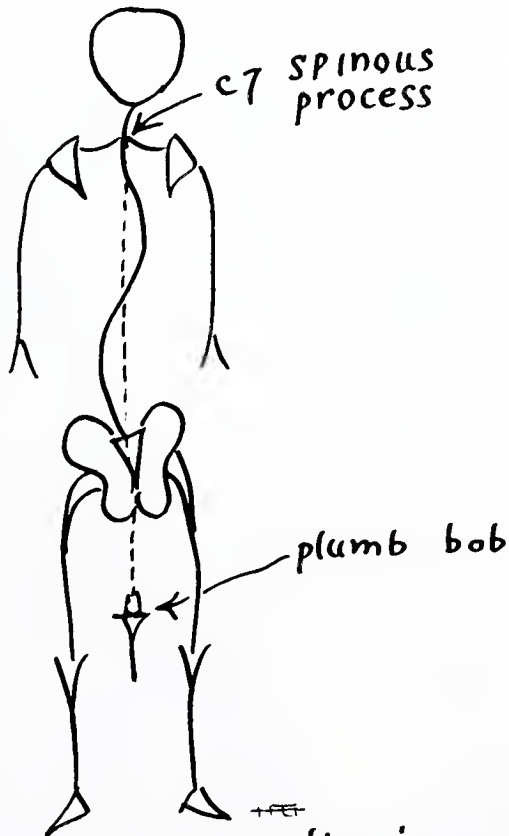
- (a) idiopathic (80%)
 - (b) osteopathic
 - (c) neuropathic
 - (d) myopathic
- } (20%)

Each of these subdivisions has a congenital and



patient has noticable
"razorback" deformity
when bent over facing
the examiner

FIG. 4



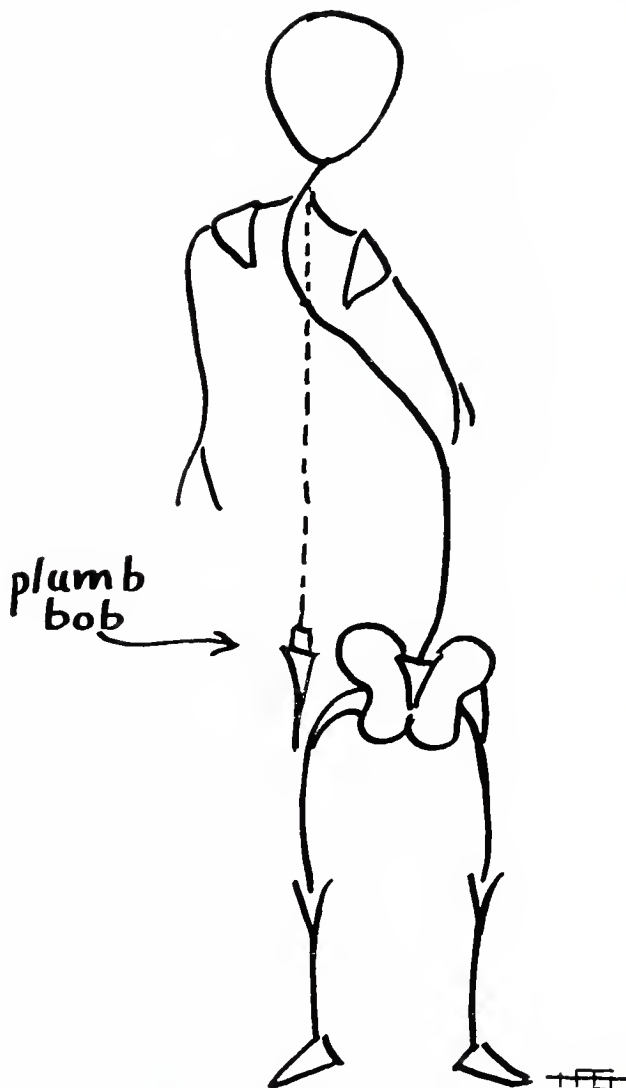
compensated scoliosis
(the plumb line bisects
the glutei)

FIG. 5

acquired form except for the idiopathic as its etiology is unknown. (Fig. 3 & 7)

POSTURAL

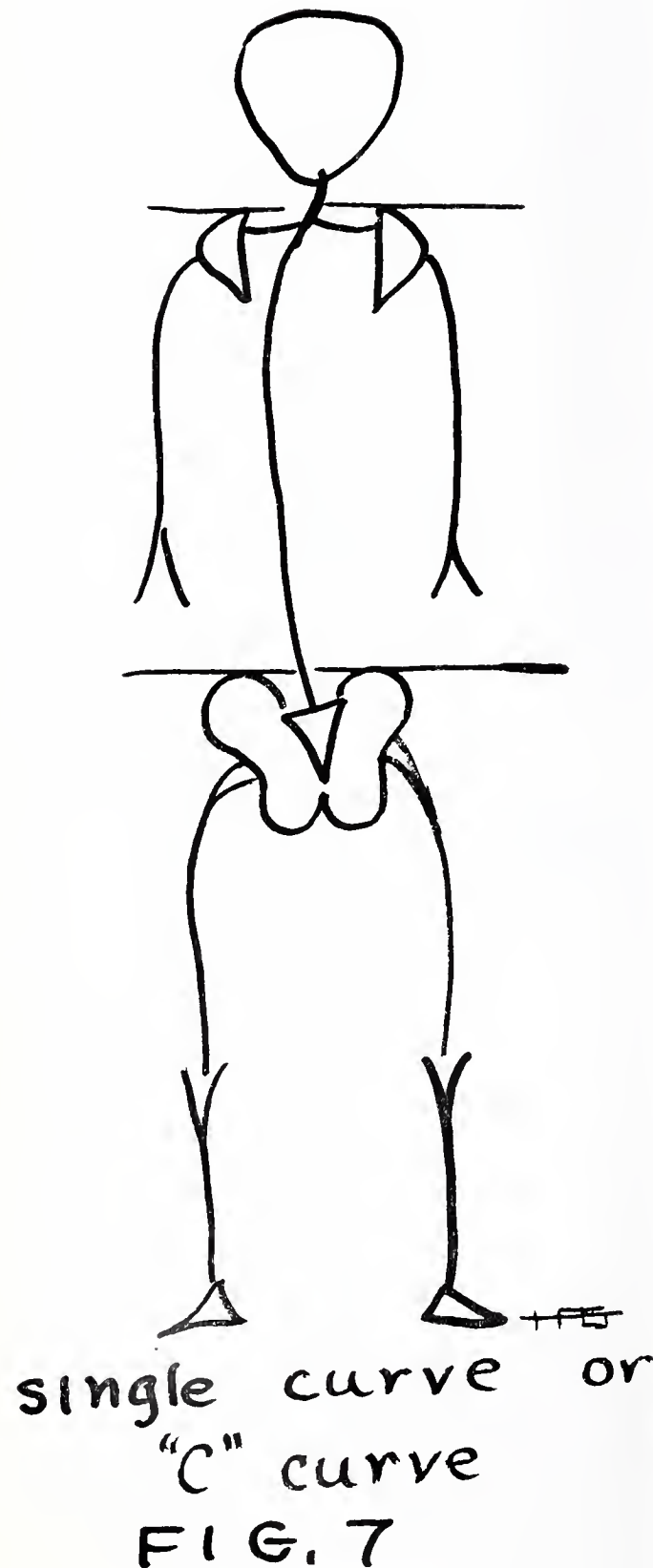
Postural scoliosis is of less concern therapeutically and prognostically, but is just as important diagnostically. *Poor posture* requires no treatment and is clinically unimportant. *The short leg* requires a lift to level the pelvis and its associated scoliosis does not become structural. Do not forget the short limb may require other treatment and follow up until growth has ceased. *Pelvic tilt*, secondary to abduction or adduction contracture of the hip along with sciatic and hysterical scolioses, causes a curve in only one plane. Usually the single long curve is convex to the left and there is no compensatory curve.



uncompensated
curvature
(invariably worsen)

FIG. 6

The minimal rotation that occurs in postural curves is to the concave side rather than the convex side as with structural scolioses. In recumbency and on suspension postural curves disappear and can be corrected voluntarily by the patient. Lateral bending is equally flexible to the right or left clinically and radiographically and there are no structural changes of the vertebrae on x-rays.

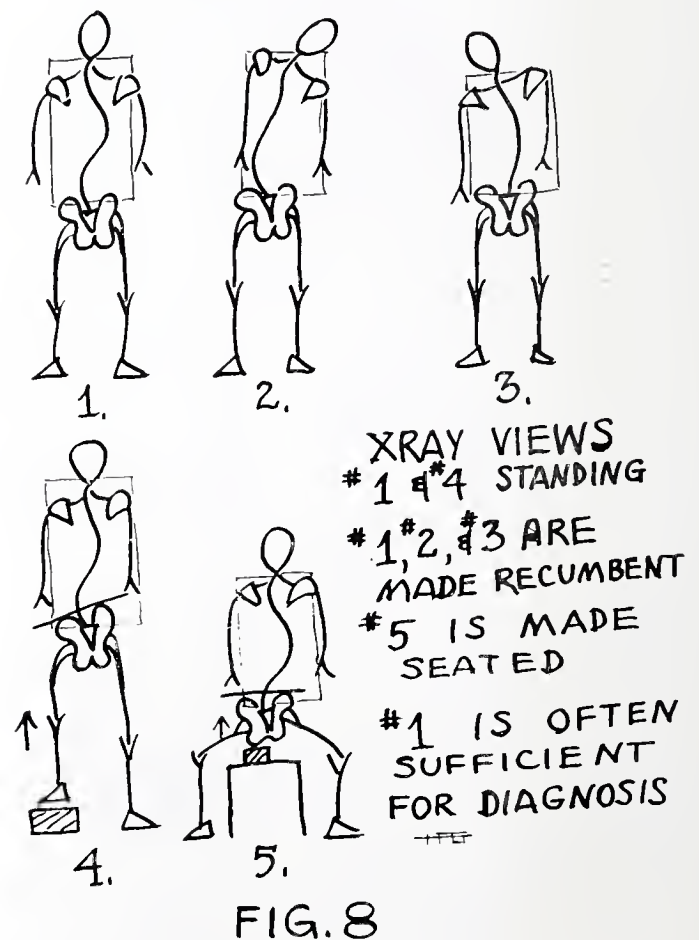


STRUCTURAL

Eighty percent of *structural scolioses* are idiopathic and constitute the majority of those undergoing active observation and treatment. The remaining 20% are congenital osteopathic (hemi-vertebrae and unilateral bars) causing deformities due to asymmetrical growth patterns, and neuropathic (neurofibromatosis, etc.) and myopathic (muscular dystrophy, etc.). Familial occurrence of idiopathic scoliosis is twenty times as great as in the general population, indicating a dominant inheritance factor.

Incidence is increased in three periods, (1) *infantile* (during the first year of life), 95% of which resolve spontaneously; (2) *juvenile* (5-6 years of age); and (3) *adolescence* (11th year to the end of the growth period). Etiology is unknown but is due to whatever affects the asymmetrical growth of the epiphyseal plates.

Epilepsy and mental deficiency are commonly associated with the infantile group and an environmental factor is suggested due to asymmetrical skull and facial configurations. Older mothers can expect to have a higher than normal number of idiopathic scolioses in the adolescent group. Congenital osteopathic anomalies spe-



cifically hemivertebrae and unilateral bars frequently require earlier operative treatment than those due to other causes, exclusive of tumors of the spine.

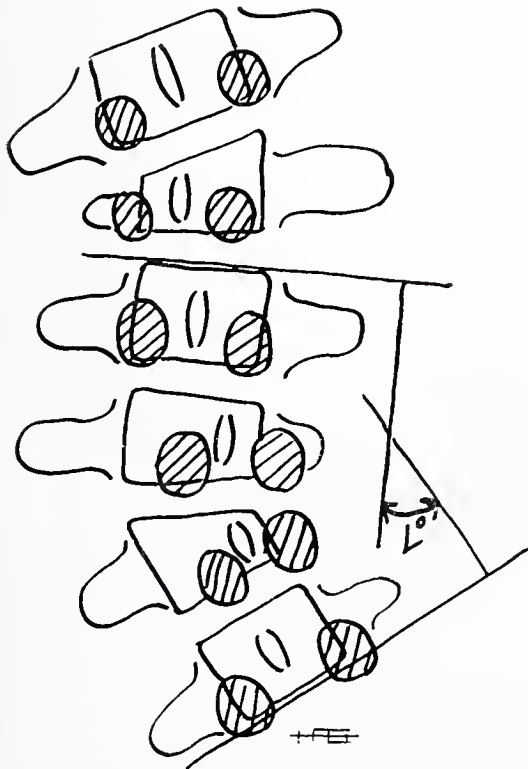
TREATMENT

Treatment varies somewhat with each physician but usually consists of:

- (a) Periodic clinical and radiographic measurement (three to six month intervals)
- (b) Exercise program in or out of brace
- (c) Milwaukee Brace (majority)
- (d) Risser-Cotrel jacket (plaster or plastic)
- (e) Halo traction for management of cervical curves in conjunction with Risser or Risser-Cotrel jackets
- (f) Surgical procedures (usually not done before 9 years of age)
 - (1) Harrington spinal instrumentation (rods) and/or
 - (2) Hibbs Fusion

PROGNOSIS

The prognosis varies markedly and emphasizes the need for a proper and prompt diagnosis.



COBB METHOD OF
CURVE MEASUREMENT

FIG. 9

Generally, the higher the primary curve is in the vertebral column, the worse the prognosis. EMG studies show the long muscles on the convex side were acting strongly and action of the short muscles increased the stiffness furthering the degree of rotation. Maximum pressure on the vertebral bodies is at the apex of the curves. In the young patient, 10 to 12 years, a severe curve indicates a tougher problem in brace control. When unable to maintain a curve in the brace or Risser-Cotrel jacket usually means surgical fusion is indicated.

GENERAL REMARKS

Participation in sports activities varies with the age, diagnosis, treatment or observation, and degree of curve. A 30 degree curve which is stable over a period of several months of observation may be allowed to participate in most non-contact sports activities if the patient is asymptomatic. Should symptoms of pain, muscle spasm, or neurological signs appear, activities should be curtailed and more intensive investigation undertaken, especially in neurological changes. An exercise program is encouraged even in those patients who are in the Risser-Cotrel jacket or Milwaukee brace.

Cardiopulmonary function evaluation is vital in severe scoliosis and in those with congenital heart disease. Total lung capacity or vital capacity is decreased when thoracic curves are in excess of 50 degrees. When the curve exceeds 100 degrees symptoms of tachypnea and hypoxia can occur. Cor pulmonale and pulmonary hypertension are grave complications.

A thorough discussion of the disease is carried out with the parents and the child on the initial office visit. This is often an emotion choked situation which should not be rushed.

It is beneficial, psychologically, to have most or all the follow up scoliosis patients meet at the clinic to give them a chance to see and discuss their mutual problems before being seen by the examiner.

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Common Ticks in Arkansas*

Harvie R. Ellis, D.V.M.*

Ticks were very abundant in Arkansas in 1974 as most campers, fishermen and animal owners have learned through experience. Many complaints and calls for assistance concerning just what to do about a bad tick problem have been received by State Health Department authorities.

There are about five species of hard ticks which are more likely to be of public health significance in Arkansas. These five ticks are: *Dermacentor variabilis* (The American Dog Tick); *Amblyomma americanum* (The Lone Star Tick); *Haemophysalis leporis-palustris* (The Rabbit Tick); *Ixodes ricinus scapularis* (The Black Legged Tick), and *Rhipicephalus sanguineus* (The Brown Dog Tick).

The American Dog Tick, *Dermacentor variabilis*, is an important vector of disease and frequently encountered by sportsmen and people who work out-of-doors. This tick and other species are attracted by the scent of animals, hence most numerous along roads, paths and trails. Dogs have been known to pick up hundreds of the American Dog Tick in a single day of running in grassy areas. Such infestations cause loss of condition in dogs, a bad disposition in the animals and an unpleasant task for owners in tick removal.

The larvae and nymphs of the tick parasitize small rodents and the adults attack man and other large mammals, such as deer, cattle and horses. Fortunately, transmission of disease does not appear to occur unless the tick remains on its host for two or more hours. The dog tick has been found infected with Q-fever, tularemia and spotted fever, all of which are transmissible to man. Transovarial transmission is an important factor in tick-borne disease. Disease agents are

transmitted by the female tick to the next generation through the egg.

Tick paralysis, or toxicosis, is caused by secretions of the tick and not by a specific etiologic agent. Removal of the tick produces rapid recovery of the victim. If the tick is not found and removed before its poison has involved the base of the brain then death may occur in spite of removal. Children are more at risk of tick paralysis than adults due to their play habits in wooded and grassy areas. Tick paralysis occurs in dogs, cattle and a variety of other animals. The dog is the preferred adult host of *Dermacentor variabilis*, although it feeds readily on many of the large mammals and frequently attacks man. Man is not an important host since the ticks are removed before engorgement is complete and it is inconceivable that tick mating would take place on man.

The Lone Star Tick, *Amblyomma americanum*, is a known vector of spotted fever, tularemia and possibly Q-fever. This tick also can transmit disease organisms through the egg stage to the next generation. Because of their long hypostomes the larvae and nymphs, as well as adults, readily attack man and inflict a painful bite that itches for a long time. When these ticks are removed the mouthparts are ordinarily left in the skin and are not usually pulled out as in the case of other ticks. Furthermore, the Lone Star Tick is very abundant throughout Arkansas. The adult female can be identified by the white spot on the back. It is called "speck back" or "spot back" in some Ozark Mountain areas. The Lone Star Tick is an all season tick and can be found in all stages on hosts during all times of the year.

The Lone Star Tick infests a very wide range of wild and domesticated hosts, including birds. The records on dogs, cattle, man and horses are

*Director, Division of Veterinary Public Health, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

most frequent, and in that order. In one case, 4,800 specimens were observed on one ear of a deer.

The Rabbit Tick, *Haemophysalis leporis-paluatris*, is a three host tick which may help in maintaining the reservoir of spotted fever and tularemia in wild rodents. The fact that it does not ordinarily attack domestic animals and that it never attacks man, reduces its importance in public health. The Rabbit Tick infests wild birds, rabbits, hares and is sometimes found on

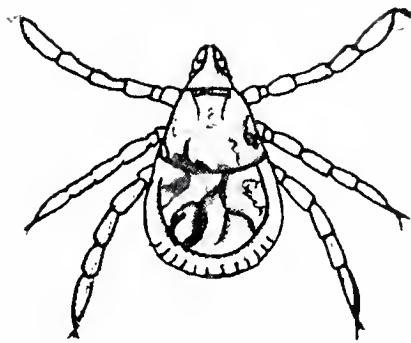
domestic poultry. Its major host is the rabbit and the adult rarely attacks other animals. In one survey, an average of 5,000 ticks were found on snowshoe hares.

The Black-legged Tick, *Ixodes scapularis*, is not a known vector of human diseases, but it is an important parasite of man and beast. The male and female specimens of this tick are frequently found mating on deer, dogs and other large mammals, in the fall and winter.

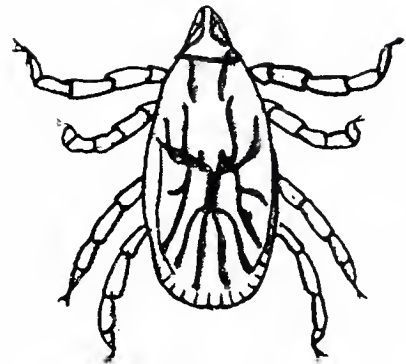
The Brown Dog Tick, *Rhipicephalus sangu-*

THE LIFE HISTORY AND HABITS OF TICKS

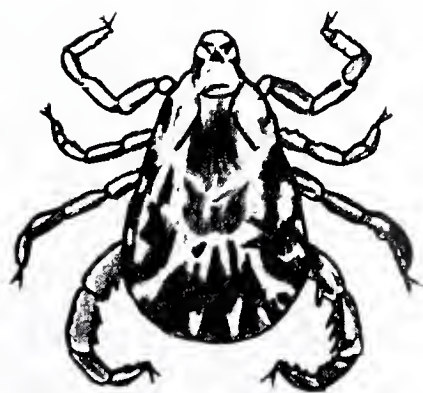
Ticks have four stages in their life history: egg, 6-legged larva, and 8-legged nymph and adult.



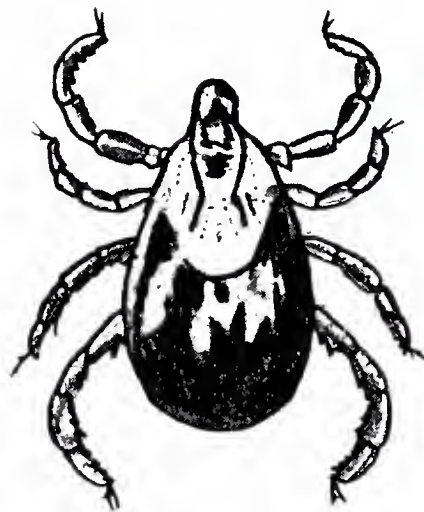
LARVA



NYMPH



MALE



FEMALE



EGG MASS

LIFE HISTORY STAGES OF AMERICAN DOG TICK

(*Dermacentor variabilis*)

ness, attacks all colors of dogs, including brown ones, and is named for its reddish-brown color. In the United States the dog is almost the exclusive host of this tick. It is doubtful it will attack man. All stages of this tick are found on dogs, chiefly on ears and between the toes. This species is one of the most common in the homes, where it feeds on dogs and then drops off the infested animal. The engorged female specimens, sometimes about a half inch long, are noticeable as they crawl on walls or around baseboards and cracks, looking for protected areas to deposit 1,000 to 3,000 eggs. People become greatly alarmed by the sudden appearance of the Brown Dog Tick indoors, and even imagine that they have been bitten. The entire life cycle of this tick can be completed in less than two months, making control a difficult problem.

Information has been presented about five important species of hard ticks that are common to Arkansas. Many different factors must be considered if tick control efforts are to be successful. Tick control may involve removal of ticks from pet animals and livestock, the use of a suitable insecticide on animals, areas and buildings, depending on the nature of the problem. A serious tick problem could require drastic measures, such as plowing, brush removal, grass cutting and burning of vegetation.

Since ticks have developed immunity from certain insecticides, it becomes necessary to employ great care in selecting the right pesticide to reduce the complexities that go with an effective tick control program. One must obtain the services of a well qualified professional pest control operator. The risk is too great healthwise, and to the environment, for the average citizen to engage in the extensive use of insecticides. If you have a tick problem, discuss it with your local veterinarian and public health authorities.

Ticks cannot be disregarded in a well-balanced public health program. The following tick-borne diseases were reported to the Arkansas Department of Health in 1974:

HUMAN CASES:

Tularemia	32
Rocky Mountain Spotted Fever	14
Tick Paralysis	0

ANIMAL CASES:

Tularemia	1 Dog
Rocky Mountain Spotted Fever	2 Dogs
Tick Paralysis	197 Dogs and 26 Cats

The various pathogens of tick-borne diseases pass from infected adult ticks through the eggs to the larval, nymphal and adult stages as shown in the life history of ticks.



PERSONAL AND NEWS ITEMS

Dr. Wright Elected

Dr. William J. Wright of Earle has been elected president-elect of the Mid-South Medical Association. Dr. Wright was elected at the ten-state organization meeting held recently in Hot Springs.

Medical Assistants Donate \$300

The Pulaski County Medical Assistants Society presented a \$300 donation to the Arkansas Association of Kidney Patients recently. The money will help support the Kidney House in Little Rock, a home for kidney patients and their families who must travel to Little Rock for medical attention.

Dr. Bruce Speaks

Dr. Thomas A. Bruce, Dean of the University of Arkansas School of Medicine, spoke at the Southeast Arkansas Medical Society meeting held recently in Monticello. Dr. Bruce spoke on "The Development of Primary Care Programs in the Medical School."

Dr. Massey's "Future Physicians Club"

Dr. L. D. Massey of Osceola has sponsored the Future Physicians Club at the Osceola High School, with help from the local Kiwanis Club, since 1958. The club, with a membership of over fifty students this year, tries to interest students in careers in the health field.



EDITORIAL

Tetracycline Syrup—Who Needs It?

By Kelsey J. Caplinger, M.D.*

It stretches the imagination to believe that 15 tons of tetracyclines were used in one year to treat relatively rare rickettsial infections in children! This is the amount (more than 13,000 kg.) of tetracycline in liquid pediatric dosage forms certified by the Food and Drug Administration for the year ending June 1973. This is a 5% increase over the previous year and is enough to treat 2,600,000 children with 1 Gm/day for five days. (Yaffec *et al* PEDIATRICS 1:142, 1975)

It is difficult to identify common pediatric infections for which an oral tetracycline is the drug choice. Penicillin G is preferable for streptococcal and pneumococcal infections; and, if allergy precludes the use of penicillin, erythromycin can be used. Ampicillin is the first choice for *Hemophilus influenzae* respiratory infections. Gram negative urinary tract infections in children can be treated with sulfonamides, nitrofurantoin, ampicillin, or cephalosporins. Mycoplasma pneumonia is unusual before age ten and is responsive to erythromycin. Of course, tetracycline might be used in children with multiple allergies to the above drugs but that is uncommon and could only account for using something less than one ton per year.

For many years adverse reactions to tetracyclines have been described in the labeling for all drugs in this family (tetracycline, chlortetracycline, demeclocycline, doxycycline, methacycline, minocycline, oxytetracycline and rolitetracycline). In fact, since 1970, the labeling for all tetracyclines marketed in the United States has included the following warning:

The use of drugs in the tetracycline class during tooth development (last half of pregnancy, infancy, and childhood to the age of

8 years) may cause permanent discoloration of the teeth (yellow-gray-brown). This adverse reaction is more common during long-term use of the drugs but has been observed following repeated short-term courses. Enamel hypoplasia has also been reported. TETRACYCLINE, THEREFORE, SHOULD NOT BE USED IN THIS AGE GROUP UNLESS OTHER DRUGS ARE NOT LIKELY TO BE EFFECTIVE OR ARE CONTRAINDICATED.

Although dental staining is the most obvious side effect of the use of tetracyclines in children, it is by no means the only one. The list includes enamel hypoplasia in both deciduous and permanent teeth; temporary inhibition of bone growth; "bulging fontanel syndrome;" *Candida albicans* overgrowth resulting in vaginitis, proctitis, and oral thrush; gastroenteritis; potential for precipitating or worsening renal failure, phototoxicity, rashes, and allergic reactions.

A study by Scheckler and Bennett (JAMA 213: 264, 1970) on the use of tetracyclines in a community hospital showed that it was prescribed three times more frequently than in a teaching hospital. In the latter, antibiotics were given only with the approval of the infectious disease group. This leads to the speculation that tetracyclines would be used less if their use had to be defended on the basis of microbial susceptibility or risk to benefit ratio.

In Canada, members of the Department of Pediatrics of McGill University voiced their concern in a letter to the *Canadian Medical Journal* (Can. Med. Assoc. J. 110:380, 1974). They urged that marketing of oral pediatric preparations of tetracycline be prohibited. This would perhaps

*Post Office Box 5675, Little Rock, Arkansas 72205.

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Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

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be more consistent than the present situation in this country. We have drug labeling stating that a drug "should not be used" for children up to the age of 8 years, but this warning accompanies a bottle of "pediatric drops" and gives schedules for small children.

There are compelling reasons (primarily dental) for not prescribing tetracyclines to children under 8 years of age. Nevertheless, it continues to be common practice often as "shotgun therapy" for nondiagnosed febrile illnesses. It is

difficult to justify continued availability of drop and syrup formulations in massive amounts, and pharmaceutical companies should respond to this lack of need. But, the physician must assume the ultimate responsibility for prescribing drugs — not the pharmaceutical companies or federal regulatory agencies. Therefore, physicians who care for children should continually re-examine their use of tetracycline.

Tetracycline Syrup — Who needs it? Not small children!



MEDICINE IN THE



THE MONTH IN WASHINGTON

The 94th Congress, which numbers within its ranks the largest group of Democratic freshmen representatives to have crossed the Potomac in a generation, has quickly proved that it has a will of its own and a flagrant disregard for the tradition of seniority.

A successful "freshman revolt" within the House Democratic caucus has toppled a number of good-old-boys from important committee chairmanships and dealt a stinging blow to the half-century-old seniority system.

A less dramatic revolution, but just as significant, has quietly occurred in the Senate. Senator Edward Kennedy, (D.-Mass.), after mustering a liberal coalition in his party's Steering Committee, handed out a beating to Democratic conservatives with respect to committee assignments.

But what legislative inklings this tumultuous reorganization of the Congress holds for medicine is still far from clear.

Saddled with grave economic problems, President Ford stated unequivocally that his Administration will not introduce a national health in-

surance measure (NHI) in the first session of this Congress. Making it painfully clear in his State of the Union message that the Congress was also saddled with grave economic problems, the President also said that he would veto any approved new spending programs other than those concerned with energy.

The President's stand would seem to make it difficult indeed for Democratic liberals to get a NHI bill enacted this year, despite the enormous pressures from labor that some of them feel.

On the other side of the picture, however, House Speaker Carl Albert (D.-Okla.) in his party's formal reply to the President's State of the Union message, urged the President to reconsider his apparent threat to veto NHI this year. Albert said NHI merits high priority.

Other top members of the Democratic leadership in both houses have gone on record as favoring NHI this year, including Al Ullman (D.-Ore.) who has replaced Wilbur Mills as Chairman of the House Ways and Means Committee.

During the organization of the 94th Congress, the House Ways and Means Committee was expanded from 25 to 37 members — largely through

the addition of liberals — and for the first time subcommittees were established, four in number. Under the "two-to-one-plus-one" formula governing party representation on committees, this means that Ways and Means now consists of 25 Democrats and 12 Republicans.

Chairman of the new Ways and Means subcommittee on health is Rep. Dan Rostenkowski (D.-Ill.). Apparently determined to make a name for himself in the health field, the Chicago Democrat has declared, "I see my role not as a proponent of an individual point of view, but rather as that of a consensus-builder — one who will try to resolve the differences that presently block the passage of this landmark program."

Rostenkowski said his 13-member panel will start work on health legislation immediately following Ways and Means' deliberations on the President's Emergency Energy and Tax message.

"Although regular meetings of my committee won't begin until the early spring," he said, "I hope that the other committee members will review the considerable materials that are now available on this subject in order that in the spring we can begin in earnest.

"At the present time, over \$100 billion is spent annually on the health care of the American people, thus, any legislation that seeks to significantly alter both the financing and the delivery of that health care will have to be developed with an acute sensitivity of the many diverse problems involved. Equally as important in changing the present system of health care, we must also be concerned with the 4.4 million Americans who are employed in this, the nation's third largest industry."

Shortly after making this statement, Representative Rostenkowski announced the formation of an Advisory Panel of National Health Insurance — "a group from whom the subcommittee can draw expert information and advice for use in its work on national health insurance."

The subcommittee chairman's statement continued: "The passage of national health insurance legislation is a must, but must be sound, workable legislation. The people who have agreed to serve on this Advisory Panel are recognized experts on various issues which the subcommittee will have to resolve and should contribute much to our work."

The list of panel members, however, was not immediately released.

* * * *

The parade of national health insurance bills has begun. Senator Kennedy and Representative James Corman (D.-Calif.) have introduced Labor's Health Security Act, essentially last year's Labor NHI measure calling for complete federal financing of health care for all at a price tag of \$85 billion plus. Kennedy's action signified that he will again be the standard bearer of the Labor plan despite some coolness after the Senator last year supported a compromise plan drafted with Representative Wilbur Mills (D.-Ark.). The American Hospital Association's "*Ameriplan*" calling for health care corporations centered on hospitals as the focus of the health care delivery system has been dumped in the hopper sponsored anew by Chairman Al Ullman (D.-Ore.) of House Ways and Means and assigned the coveted H.R. 1 legislative number.

It seems certain that a new version of the Senator Russell Long (D.-La.) and Senator Abraham Ribicoff (D.-Conn.) proposal for "catastrophic" NHI will also be introduced.

There are some who believe that due to the faltering economy, the Long-Ribicoff proposal will draw more attention than it did in the last Congress. With unemployment rising, the "catastrophic" proposal could gain political popularity with its obvious advantages to hard-strapped families.

And then there will be an entry from the American Medical Association. Not yet ready for introduction, the AMA proposal may contain some changes from its Medibid bill of last year.

The AMA House of Delegates at the Portland meeting last December gave the Board of Trustees a vote of confidence for its efforts to develop new approaches to national health insurance which maintain traditional AMA goals.

The House at Portland also adopted a Board report containing basic guidelines for national health insurance deliberations.

The guidelines include minimum federal involvement in the administration of any national health insurance program; state jurisdiction for licensure of physicians and regulation of insurance; no Social Security tax financing and administration of any program; funding through

federal revenues, state revenues, and private funds, including employer-employee contributions, for private health insurance; comprehensive coverage for basic and catastrophic needs; and the maintenance of pluralism in health delivery.

Additionally, AMA President Dr. Malcolm Todd has been quoted in the press as saying the objective of his organization's new national health insurance proposal will be to make it more flexible, while at the same time maintaining certain basic precepts.

* * * *

Other changes have been made — with more still to come — in the structure of congressional committees of interest to medicine, though none quite so spectacular as the re-vamping of the House Ways and Means Committee.

The Senate health leadership lineup should be much the same this year. Chairman Russell Long of the Senate Finance Committee will be the dominant man in NHI, and Senator Herman Talmadge (D.-Ga.), Chairman of Finance's Health Subcommittee, is slated to be heard from increasingly. Senator Edward Kennedy again will be Chairman of the Health Subcommittee of Senate Labor and Public Welfare which is led by Sen. Harrison Williams (D.-N.J.).

Representative Paul Rogers (D.-Fla.) is in line to continue as head of the powerful Health Subcommittee of the House Commerce Committee and to be even more influential in the 94th Congress due to the transfer of some health jurisdiction from Ways and Means. Rogers is sure to carve out a sizable chunk of any NHI program for his purview.

Representative Harley O. Staggers (D.-W.Va.), Chairman of the full Commerce Committee, was defeated in a bitter battle by Representative John E. Moss (D.-Calif.) for the chair of the Special Subcommittee on Investigations. Moss has said he plans hearings on matters under the jurisdiction of the committee, including health.

* * * *

Before the dust had settled from the skirmishing involved in the organization of the Congress, plans were being mapped for health legislative action. The House Commerce Subcommittee on Health is slated to take up quickly the two health bills vetoed late last year by President Ford — providing aid for Nurses Training and the \$1.8

billion measure authorizing community mental health centers, neighborhood health centers, and the like.

Sen. Edward Kennedy, chief of the Senate Health Subcommittee, has introduced both bills in a single package and defied another veto. Not known is whether Congress will attempt to modify the measures to forestall a veto.

The House and Senate Health Subcommittees also are slated to take up early the Health Manpower measure which collapsed in the final days of the last session. The Administration is still working on a new proposal. Kennedy is expected to make another pitch for his sweeping bill requiring compulsory federal service for young physicians and the licensing and re-licensing of physicians.

* * * *

Medical liability is emerging as a hot topic on Capitol Hill this year. The Senate Health Subcommittee will hold mid-March hearings on a bill sponsored by Kennedy and Sen. Daniel Inouye (D.-Hawaii) embodying a no-fault approach plus arbitration. A controversial section requires physicians who wish to be included under the program to have their practice reviewed by Professional Standards Review Organizations and reside in states with licensure and relicensure laws. Representative Dan Rostenkowski, Chairman of the Health Subcommittee of Ways and Means, has submitted a bill calling for a federal study of the problem. Sen. Gaylord Nelson (D.-Wis.) has a bill establishing a federally administered program of reinsurance to protect companies against catastrophic claims.

* * * *

The Administration has asked Congress to bite the economy bullet on health programs this year. Counting the mammoth Social Security Trust Fund outlays, the Health, Education and Welfare Department's total budget for the fiscal year 1976, starting in July, would be \$118.4 billion, some \$8.5 billion above spending this year. Most of the increase is due to scheduled hikes in Social Security retirement benefits.

Budget comparisons were more than usually complicated this year because of the risky assumptions that Congress will go along with President Ford's request for a budget "recission" of \$1.2 billion for current HEW appropriations, including cutbacks of \$516 billion in health pro-

grams. (Most of the recession would be from research and mental health funds.)

As a result, though the 1976 budget for health programs in the so-called "controllable" area was described as "hold-the-line," the projected non-Medicare-Medicaid health outlays of \$4.5 billion would actually be \$500 million less than Congress initially appropriated for the present fiscal year.

The most controversial aspect of the HEW budget is the Ford Administration's proposal for economies in the "uncontrollable" trust fund field. Recommendations that will require congressional legislation. President Ford is asking Congress to limit the slated eight to nine percent increase in Social Security retirement benefits to five percent: He is seeking to curb Medicare spending by initiating higher cost-sharing provision for parts A and B. In addition, the Ad-

ministration wants to reduce federal matching grants to the wealthier states, from 50 percent to 40 percent.

Few people in the Administration are sanguine about the possibilities of a liberal Congress going along with the proposed economies in the sensitive health-welfare area. "Accomplishing this slow-down in the growth of the HEW budget will not be easy," conceded HEW Secretary Caspar Weinberger.

"Even with all of the proposals put forward by the President to reduce or slow down the growth of various government programs, the 1975 and 1976 projected deficits still will total more than \$86 billion, unprecedented deficits for peacetime," Weinberger said. "But, if the President's budget proposals are not adopted, the two-year deficit could reach \$107 billion . . . which could be ruinous."



OBITUARY

Dr. George Wesley Allen

Dr. George W. Allen of Fort Smith died February 24, 1975, at the age of fifty-two. He was born September 14, 1922. Dr. Allen was a 1947 graduate of the State University of New York College of Medicine, Brooklyn.

Dr. Allen was a member of the Sebastian County Medical Society, the Arkansas Medical Society, and the American Medical Association. He was president of the Area Wide Comprehensive Health Planning Board and a board member of the Western Arkansas Planning and Development District. He was a past president of the Arkansas Society of Internal Medicine and past chief of staff of St. Edward Mercy Hospital in Fort Smith.

He is survived by his wife, Bethley, three daughters, and a sister.

Dr. Merlin Joe Kilbury, Sr.

Dr. Merlin J. Kilbury, Sr., of Little Rock, died February 28, 1975, at the age of eighty-six.

He received his M.D. degree in 1928 from the University of Arkansas School of Medicine. Dr. Kilbury served as chief pathologist for more than fifty years at St. Vincent Infirmary in Little Rock. He was also a former chief of staff at St. Vincent. In 1965, Dr. Kilbury received a Distinguished Service Award from the University of Arkansas School of Medicine for his service to the institution.

He was a past president of the Pulaski County Medical Society, a member of the Arkansas Medical Society and the American Medical Association. Dr. Kilbury was a Fellow of the American Board of Pathology and the College of American Pathologists. He was a member of the Arkansas Society of Clinical Pathologists.

Dr. Kilbury is survived by his wife, Elizabeth, a daughter, and a son, Dr. Merlin J. Kilbury, Jr., all of Little Rock.

Dr. Francis Joseph Scully

Dr. Francis J. Scully, age eighty-four, of Hot Springs, died March 10, 1975. He was a graduate

of Rush Medical College, Chicago, Illinois.

Dr. Scully was a member of the Garland County Medical Society, Arkansas Medical Society, and the American Medical Association. He was also a member of the American College of Physicians, American Society of Internal Medicine, American Geriatrics Society, and American Rheumatism Association. Dr. Scully, at one time, served on the National Board of Medical Examiners.

He is survived by six nephews and three nieces.

Dr. Bryce Cummins

Dr. Bryce Cummins of Little Rock died February 25, 1975, at the age of seventy-five. He was born May 27, 1899. Dr. Cummins was a 1925 graduate of the University of Arkansas School of Medicine.

Dr. Cummins was a member of the Pulaski County Medical Society, the Arkansas Medical Society, and the American Medical Association.

He is survived by his wife, Marye, a daughter, and a brother.



ANSWER—Electrocardiogram of the Month

There is a typical pattern of right bundle branch block. The axis is to the left and is consistent with either left anterior hemiblock or incomplete left bundle branch block, either of which combined with right bundle branch block is compatible with bilateral bundle branch disease. Careful ECG monitoring and 24 hour continuous EEG scans should be helpful in determining whether a dangerous arrhythmia such as intermittent complete heart block would explain the episodic dizziness.



THINGS TO COME

Human Sexuality Workshop

A Human Sexuality Workshop sponsored by the Arkansas State Nurses Association, Psychiatric Mental Health Conference Group, and co-sponsored by the University of Arkansas School of Nursing Continuing Education Program will be held May 17-18, 1975, at Ferncliff Camp, Little Rock, Arkansas.

The course involves information about sexuality and sexual functioning, attitude clarification regarding sexual roles and practical guidelines in assisting patients who have concerns about sexuality or who have a physical disability interfering with their sexual functioning. The workshop will use interactional techniques, small group discussion, films, videotaped vignettes, role-playing, and some lecture presentation.

For application information contact: Mary Councille, Slot 568, Department of Psychiatry, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205. Phone 501-664-5000, extension 206.



NEW MEMBERS

Dr. Charles G. Reul

The name of Dr. Charles G. Reul has been added to the membership roll of the Sebastian County Medical Society. He is a native of East Orange, New Jersey.

Dr. Reul received an A.B. degree in 1960 from Princeton University, Princeton, New Jersey. He was graduated from the Columbia University College of Physicians and Surgeons, New York, in 1964. His internship was completed at North Carolina Memorial Hospital, Chapel Hill. Dr. Reul's residency work in Neurology was at the North Carolina Memorial Hospital and the Neurological Institute, New York, New York. He is Board Certified by the American Board of Neurology, and a member of the American Academy of Neurology.

Dr. Reul is associated with the Holt-Krock Clinic at 1500 Dodson Avenue in Fort Smith where he specializes in Neurology.

Dr. Paul R. Schwarz

Dr. Paul R. Schwarz, a native of St. Louis, Missouri, is a new member of the Sebastian County Medical Society.

Dr. Schwarz was graduated from Grinnell College, Grinnell, Iowa, in 1964 with a B.A. degree. He was graduated from Washington University School of Medicine, St. Louis, Missouri, in 1968. Dr. Schwarz completed his internship and a residency in Internal Medicine at St. Luke's Hospital, St. Louis.

Dr. Schwarz practices Internal Medicine at 404 South 16th Street in Fort Smith, associated with Dr. E. Z. Hornberger, Jr., Dr. Lawrence C. Price, and Dr. Hugh Lewing.

Dr. Thomas N. Williams

The Sebastian County Medical Society has accepted for membership Dr. Thomas N. Williams, a native of Muleshoe, Texas.

Dr. Williams attended Texas Technological College in Lubbock, and was graduated from the University of Texas Medical Branch, Galveston. He completed his internship in straight medicine, a two-year residency in Internal Medicine, and a two-year residency in Cardiology at the same institution. He is Board Certified by the American Board of Internal Medicine.

Dr. Williams is associated with the Holt-Krock Clinic at 1500 Dodson Avenue in Fort Smith, where he specializes in Internal Medicine.

Dr. Jimmy G. Bozeman

The Baxter County Medical Society has accepted for membership Dr. Jim G. Bozeman. He is a native of Hamburg, Arkansas.

Dr. Bozeman received a B.S. degree in 1968 from Arkansas A and M College at Monticello. He was graduated from the University of Arkansas School of Medicine in 1972, and he completed his internship at the Medical Center in Little Rock. His residency in Family Practice was completed at St. Vincent Infirmary, Little Rock. Dr. Bozeman is Board Certified by the American Board of Family Physicians, and he is a Diplomate, American Board of Family Physicians.

Dr. Bozeman practices Family Medicine at the

Salem Clinic in Salem, Arkansas. He is associated with Drs. Carl Arnold and Michael Moody.

Dr. Darryl Robert Francis, II

The Sebastian County Medical Society has added the name of Dr. Darryl R. Francis, II, to its membership roll. He is a native of Springfield, Missouri.

A 1962 graduate of the University of Notre Dame, South Bend, Indiana, Dr. Francis was graduated from the University of Missouri School of Medicine, Columbia. His rotating internship was completed at the University of Cincinnati, Cincinnati General Hospital. Dr. Francis completed a two-year General Surgery residency at Jewish Hospital of St. Louis, and a three-year Urology residency at Barnes Hospital in St. Louis.

Dr. Francis practices Urology at 600 South 14th Street in Fort Smith, associated with Dr. Archie L. Hewett and Dr. Frederick P. Feder, Jr.

Dr. Jerry O'Connor Lenington

Dr. Jerry O. Lenington has been accepted for membership in the Sebastian County Medical Society. He is a native of Amarillo, Texas.

Dr. Lenington received his pre-medical education at the University of Oklahoma, West Texas State College, and Amarillo College. He was graduated from the University of Texas Medical Branch, Galveston, in 1968. Dr. Lenington served in the United States Navy from 1967 until 1974 and completed his internship at the United States Naval Hospital in Jacksonville, Florida, and his residency at the Naval Hospital in San Diego, California.

Dr. Lenington is associated with the Holt-Krock Clinic at 1500 Dodson Avenue in Fort Smith, where he specializes in Anesthesiology.

Dr. William L. Norwood

The Sevier County Medical Society has accepted for membership Dr. William L. Norwood, a native of El Dorado, Arkansas.

Dr. Norwood received his pre-medical education at the University of Arkansas and was graduated from the University of Arkansas School of Medicine in 1966. His internship and General Surgery residency were completed at the Confederate Memorial Hospital, Shreveport, Louisiana. Dr. Norwood served in the United States Navy for two years. He is associated with the

DeQueen Clinic, Ltd., DeQueen, Arkansas, where he specializes in General Surgery.

Dr. William Curtis Williams

Dr. William Curtis Williams, a native of Amity, Arkansas, has been accepted for membership in the Sevier County Medical Society.

He received a B.S. degree in 1961 from Henderson State Teachers College, Arkadelphia, Arkansas, and was graduated from the University of Arkansas School of Medicine in 1967. Dr. Williams completed his internship and Radiology residency at the University of Arkansas Medical Center in Little Rock. He is Board Certified by the American Board of Radiology and he is a member of the American College of Radiology.

Dr. Williams is associated with the DeQueen Clinic, Ltd., DeQueen, Arkansas, where he specializes in Radiology.

Dr. William C. McBryde

The Van Buren County Medical Society has accepted Dr. William C. McBryde for membership. He is a native of Pine Bluff, Arkansas.

Dr. McBryde attended Arkansas State University, Jonesboro, Arkansas, and was graduated from the University of Arkansas School of Medicine in 1973. He completed his internship at St. Vincent Infirmary in Little Rock.

Dr. McBryde is now in General Practice at the Fairfield Bay Medical Center, Fairfield Bay.

Dr. Audrey James Thompson

Dr. A. J. Thompson, a native of Hardy, Arkansas, has been accepted for membership in the Pulaski County Medical Society.

He was graduated from Arkansas State University, Jonesboro, Arkansas, with a B.S. degree in 1962, and was graduated from the University of Arkansas School of Medicine in 1968. He completed his internship at the University of Arkansas Medical Center. His residency work in Internal Medicine was also at the Medical Center and he held a Fellowship in Cardiology there from 1970 until 1972. From 1972 until 1974, Dr. Thompson was a Cardiology resident at the School of Aerospace Medicine at Brooks Air Force Base, Texas.

Dr. Thompson is Board Certified by the American Board of Internal Medicine. He is a member of the American College of Cardiology and

the American College of Physicians. He specializes in Cardiology at 500 South University in Little Rock.

Dr. Gary Stephen Markland

Dr. Gary S. Markland has been accepted for membership in the Pulaski County Medical Society. He is a native of Little Rock, Arkansas.

Dr. Markland received his B.A. degree from the University of Arkansas in 1967. He was graduated from the University of Arkansas School of Medicine in 1971 and completed his internship at the University of Arkansas Medical Center. He completed a Pathology residency at the Medical Center in 1974. He is Board Certified by the American Board of Pathology.

Dr. Markland specializes in Pathology at 9600 West 12th Street in Little Rock.

Dr. Edwin Hankins, III

Dr. Edwin Hankins, III, has been accepted for membership in the Pulaski County Medical Society. He is a native of Hope, Arkansas.

Dr. Hankins received a B.S. degree in 1964 from Southwestern at Memphis, Memphis, Tennessee. He was graduated from the University of Arkansas School of Medicine in 1970, and completed his internship at Kansas University Medical Center, Kansas City, Kansas. In 1974, he completed an Ophthalmology residency at the University of Texas Medical School, Houston.

Dr. Hankins practices Ophthalmology at 500 South University in Little Rock.

Dr. Jerry M. Herron

The Pulaski County Medical Society has added the name of Dr. Jerry M. Herron to its membership roll. He is a native of Columbus, Ohio.

Dr. Herron received his B.S. degree in 1961 from Ohio State University, Columbus. He was graduated from the Ohio State University College of Medicine, Columbus, in 1965. His internship was completed at Baylor University Medical Center, Dallas, Texas. He completed his residency in Medicine at Duke University Medical Center and was also a Fellow in Allergy and Chest Diseases at the same institution.

Dr. Herron practices Internal Medicine at the Medical Towers Building, Suite 350, in Little Rock. He is an associate member of the American College of Physicians and the American Thoracic Society.

Dr. Clarence Ervin Ballard, Jr.

Dr. Clarence E. Ballard, Jr., has been accepted for membership in the Pulaski County Medical Society. He is a native of Little Rock.

Dr. Ballard was graduated from Hendrix College, Conway, Arkansas, in 1967, receiving a B.A. degree. He was graduated from the University of Arkansas School of Medicine in 1971. He completed his internship at the University of Arkansas Medical Center. Dr. Ballard completed a residency in General Surgery at Baptist Medical Center, Little Rock, in 1973, and a residency in Otolaryngology at the University of Arkansas Medical Center in 1974.

He is now in Family Practice at 9600 West 12th Street, Little Rock.

Dr. David Wilson Bevans, Jr.

Dr. David W. Bevans, Jr., a native of North Little Rock, is a new member of the Pulaski County Medical Society.

He attended Washington and Lee University, Lexington, Virginia, and was graduated from the University of Arkansas School of Medicine in 1966. His internship was taken at St. John's Hospital, Tulsa, Oklahoma. He served in the United States Air Force from 1967 until 1969. Dr. Bevans completed a General Surgery residency at the University of Arkansas Medical Center in 1973, and he received residency training in Thoracic Surgery at the Veterans Administration Hospital in Little Rock.

Dr. Bevans practices General, Thoracic, and Vascular Surgery at 406 West Pershing in North Little Rock. He is Board Certified by the American Board of Surgery.

Dr. Harry Howard Cockrill, Jr.

The Pulaski County Medical Society has accepted Dr. H. Howard Cockrill, Jr., for membership. He is a native of Little Rock.

Dr. Cockrill attended the University of the South, Sewanee, Tennessee, where he received a B.S. degree in 1962. He was graduated from the University of Arkansas School of Medicine in 1968. He completed his internship at the University of Oregon Hospital, Portland. In 1974, he completed a Radiology residency at Duke University School of Medicine, Durham, North Carolina.

Dr. Cockrill practices Radiology with Radiol-

ogy Associates, P.A., at 500 South University in Little Rock.

Dr. Burton Allan Moore

Dr. Burton A. Moore, a native of Little Rock, is a new member of the Pulaski County Medical Society.

He received his B.S. degree in 1965 from the University of Arkansas and was graduated from the University of Arkansas School of Medicine in 1967. His internship was completed at Wilford Hall United States Air Force Hospital, San Antonio, Texas. In 1974, Dr. Moore completed a Residency in Dermatology at the Mayo Graduate School of Medicine, Mayo Clinic, Rochester, Minnesota. He is a member of the American Academy of Dermatology.

Dr. Moore practices Dermatology at the Little Rock Dermatology Clinic in Little Rock, and serves as a Clinical Instructor at the University of Arkansas Medical Center.

Dr. James Lee Schrantz

The Pulaski County Medical Society has added the name of Dr. James L. Schrantz to its membership roll. He is a native of Pine Bluff, Arkansas.

Dr. Schrantz graduated from the University of Arkansas with a B.S. degree in 1965 and was graduated from the University of Arkansas School of Medicine in 1969. He completed his internship and a four-year residency in Orthopaedic Surgery at the University of Arkansas Medical Center.

Dr. Schrantz is now practicing Orthopaedic Surgery at 1100 North University, Little Rock. He is a member of the American College of Surgeons.

Dr. Aurelius Raphael DeJanis

The name of Dr. A. R. DeJanis has been added to the membership roll of the Pulaski County Medical Society. He is a native of Naples, Italy.

Dr. DeJanis received his pre-medical education at Fordham University, New York, New York. He was graduated from the St. Louis College of Physicians and Surgeons, St. Louis, Missouri, in 1922, and was graduated from the College of Medicine and Surgery, Kansas City, Missouri, in 1926. He interned at Flushing Hospital and Dispensary, Flushing, New York. Dr. DeJanis is a Fellow in the American Geriatric Society.

He is in General Practice at 115 West Broadway in North Little Rock.

May, 1975

THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 71 No. 12

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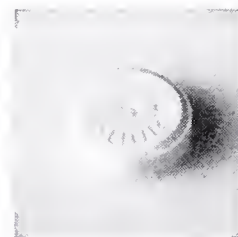
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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies.

Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

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spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 71, No. 12. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

The Diagnosis of Genitourinary Neoplasms

John F. Redman, M.D.* and Nabil K. Bissada, M.D.*

Concerning the subject of neoplasms, it is axiomatic that early diagnosis provides the greatest opportunity for cure. All clinicians have a horror of overlooking a neoplasm. Yet too frequently patients with far advanced disease report prior regular visits to their physician. Their visits may well have been in regard to complaints referable to their neoplasm. If neoplasms are to be recognized early enough for cure, it is imperative that physicians be cognizant of the alerting signs and the obligatory follow-up evaluation.

The purpose of this communication is to review the presenting signs and symptoms of the general groups of genitourinary neoplasms and describe the evaluation needed to ascertain the diagnosis.

Renal Neoplasms

Adult Neoplasms:

The most common neoplasm of the kidney in adults is renal cell carcinoma. The incidence is 83.4 percent.¹ It occurs twice as frequently in males as in females. The usual age of occurrence is between the fifth and sixth decades, although the lesion can be found at any age. The classic hallmarks of diagnosis have long been listed as the "cardinal triad" and include hematuria, pain and a palpable mass. Only 55 percent of these tumors produce one or more of the symptoms of the classical triad. The actual occurrence of this triad is only 5 percent. These symptoms occur with more or less equal frequency, but the presence of the three symptoms in the same patient is unusual. Renal cell carcinoma has been called one of the great mimics to be ranked with syphilis and tuberculosis in regard to its protean manifestations. Some of these nonspecific presentations are weight loss, low grade fever, gastrointestinal complaints, hypertension, anemia, erythrocytosis, a leukemoid reaction, and hypercalcemia.²

The nonspecific complaints merit prompt deep palpation of the kidneys and microscopic examination of the urine. A palpable mass, hematuria or renal pain should prompt excretory urography (IVP). For the excretory urogram to be considered normal, all of the renal collecting structures should be seen clearly outlined by the contrast media. The renal contour should also be visualized. To achieve this, infusion urography with laminograms are often needed.³ If the excretory urogram is abnormal, other radiographic examinations are often employed to further delineate the abnormal area and to rule out benign disease such as cysts. These further examinations include retrograde ureteropyelography and renal angiography. As will be emphasized again, hematuria requires cystoscopy to complete the evaluation.

Childhood Neoplasms:

The most common renal neoplasm in children is the nephroblastoma or Wilms' tumor.⁴ This is considered to be a congenital lesion. The most common presentation is a palpable abdominal mass usually noted by the mother. Hematuria occurs in only about 15-20 percent of cases and is usually a late manifestation.⁵ Nonspecific complaints are gastrointestinal symptoms and weight loss. The greatest opportunity for diagnosis lies in the routine examination of the abdomen with each examination of a child even if the chief complaint is referable to the pharynx. Aniridia is a known condition with an associated high incidence of concomitantly occurring nephroblastoma.^{6,7}

Any child with a palpable abdominal mass, hematuria, aniridia, or undiagnosed abdominal complaints should be evaluated with excretory urography.

Urothelial Neoplasms:

These include neoplasms of the renal collecting structures, ureters and bladder.

*Division of Urology, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72205.

Neoplasms of the Renal Collecting Structures:

Neoplasms of the renal collecting structures are primarily papillary transitional cell carcinomas of the renal pelvis and calyces. Patients with this lesion present usually with hematuria (more than 80 percent).⁸ Microscopic hematuria may be the first clue to the diagnosis. Flank pain may be the presenting complaint if the lesion causes obstruction of all or part of the renal collecting structures.

The evaluation should, of course, include excretory urography and cystoscopy. Transitional cell lesions of the renal collecting structures may be associated with similar lesions in the bladder which would be noted on cystoscopy. The excretory urogram should provide, at least in composite views, complete visualization of all of the renal collecting structures. A further diagnostic test is cytologic examination of the urine.

Neoplasms of the Ureter:

Lesions of the ureter are primarily papillary transitional cell carcinoma. Their presentation and diagnosis is like that of lesions of the renal collecting structures. Abnormalities of the ureter on excretory urography are quite often further evaluated by retrograde ureteropyelography which is accomplished at the time of cystoscopy.⁹

Neoplasms of the Bladder:

There are three primary neoplasms of the bladder: transitional cell carcinoma (90 percent), squamous cell carcinoma (7 percent), and adenocarcinoma (1-2 percent). It occurs most frequently in men two to one and is most common in the fifth and sixth decades. Aniline dye and smokers show a predilection for the disease.¹¹ The usual presenting symptom is gross hematuria. The hematuria may or may not be painless. The pain is usually associated with a urinary tract infection which can co-exist with a vesical neoplasm.

Diagnosis is made by cystoscopy which should be done in every case of hematuria even if the cause is presumed to be only a urinary tract infection. An excretory urogram should also be done to be sure that lesions of the renal collecting structures and ureters do not exist concomitantly.

Neoplasms of the Prostate:

Adenocarcinoma of the prostate is one of the most common cancers in men and is the second leading cause of cancer death in the United

States.¹² It is primarily a disease of men over age 50, but it has been recognized in younger men. Early carcinoma of the prostate may have no symptoms. Later symptoms are usually those of obstruction of the lower urinary tract and are identical with those seen with benign prostatic hyperplasia. Symptoms of obstruction include a small urinary stream, hesitancy, straining, nocturia and intermittency. Hematuria is a more common symptom of benign prostatic hyperplasia than it is of adenocarcinoma of the prostate. The patient may also present with bone pain as a manifestation of an osseous metastasis of adenocarcinoma of the prostate.

The diagnosis is usually suggested by digital examination of the prostate via the rectum. The characteristic feel of adenocarcinoma of the prostate is that of a hard area under the surface of the gland. The hard area may be discrete like a nodule or diffuse. The diffuse hardness may extend beyond the boundaries of the gland. Other useful digital criteria are the absence of the median sulcus or the presence of a palpable seminal vesicle. The differential diagnosis of a rock hard area of the prostate gland includes prostatic calculi, carcinoma of the prostate, granulomatous disease, and fibrosis, as well as firm nodules of benign prostatic hyperplasia.

Asymptomatic patients will frequently have a diagnosis of carcinoma of the prostate suggested by the finding of prostatic hardness on the routine digital rectal examination. All suspicious areas of prostatic hardness and all nodules should be biopsied. Biopsy techniques include needle biopsies by the transrectal and transperineal approaches, as well as open perineal biopsies. A plain film of the abdomen is helpful to discern areas of blastic osseous metastasis. Bone scans, particularly technetium polyphosphate scans, increase the incidence of identifying bony lesions.¹³ Elevated serum acid and alkaline phosphatase levels are suggestive of metastatic disease. Excretory urography is helpful to identify ureteral obstruction which usually occurs at the level of the trigone and orifices.

Neoplasms of the Penis:

Squamous cell carcinoma is the most common neoplasm of the penis. It is found most commonly in men of low socio-economic standing primarily on a hygienic basis. It is virtually unheard of in those circumcised at birth.¹⁴ Men

circumcised later in age are not entirely without risk, however. Carcinoma of the penis may occur on the glans or prepuce and usually is a raised irregular lesion. Carcinoma of the penis may give the appearance of many different types of penile lesions and at times will be ulcerated. For this reason any lesion of the penis is suspect. Patients will not uncommonly wait long periods after noting the onset of a lesion before presenting to a physician. The diagnosis is confirmed by biopsy and histologic examination. The penis should be examined at the time of any physical examination of men. Routinely, the prepuce should be retracted and both the glans and the prepuce should be inspected for lesions. The urethral meatus should be inspected. Discrete lesions should certainly be biopsied.

Neoplasms of the Testicle:

Neoplasms of the testes are usually seen in young adults but can occur at any age. The presenting symptom is that of a scrotal mass. Pain may be associated. At times the patient presents with a history not unlike that given with acute epididymo-orchitis.¹⁵ Testicular neoplasms are quite malignant, and seemingly short delays in diagnosis are often fatal. Undescended testes have a greater predilection for malignant change than do normally descended testes. Late testicular descent or orchiopexy, however, does not seem to lessen the incidence of malignant change.¹⁶ The presence of cryptorchidism or the history of previous orchiopexy should alert the physician to the possibility of testicular neoplasia. All patients with scrotal pathology should be carefully examined. Men with acute onset of intrascrotal pathology, including hydroceles, should receive special attention. All men undergoing physical examination are deserving of a thorough examination of the testes. The correct examination of the testes includes careful palpation of each testicle between the fingertips working from pole to pole. The testicle should also be clearly discernable from the epididymis. Men who are receiving treatment for epididymo-orchitis should undergo weekly testicular examination. If in two to three weeks the testicle still cannot be discerned from the epididymis or the testicle itself remains hard or irregular, serious consideration should be given to exploration of the testicle. The diagnosis of testicular neoplasms is by tissue biopsy. Under no circum-

stances should the testicle be biopsied through the scrotum, either by needle or open biopsy. The correct procedure is that of first making a groin incision, cross clamping the spermatic cord, delivering the testicle into the groin from the scrotum, and then inspecting the testicle. Only at this time may a frozen section be done and then only with great care that spillage of tissue not occur. The rationale for this approach is that when the tunica albuginea, a usual natural barrier to the tumor, is violated by biopsy through the scrotum, the incidence of metastasis is much greater and the surgery for complete extirpation of all tumor bearing tissue is greatly increased in magnitude.

Conclusion

Several general points can be derived from the previous discussion which should greatly increase the yield of diagnosis of genitourinary neoplasms.

- 1) All hematuria, including microscopic hematuria, should be considered reason enough for the obtaining of an excretory urogram and cystoscopy. The presence of red cell casts in the urine would be a mitigating factor.
- 2) The presence of flank pain or an abdominal or flank mass is an indication for obtaining an excretory urogram.
- 3) The excretory urogram should not be considered normal unless all of the collecting structures and the renal outlines are seen clearly.
- 4) The complete physical examination should include a careful abdominal examination, a pelvic and rectal examination, digital examination of the prostate, examination of the glans penis and prepuce, and careful examination of the testicles.
- 5) Testicular lesions should not be biopsied through the scrotal wall.

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Human Sparganosis in Arkansas

James J. Daly, Ph.D.,* Glenn F. Baker, M.D.**
and B. Richard Johnson, M.D.***

Sparganosis is an infection caused by tape-worm larvae of the genus *Spirometra* invading human tissue. These tapeworms are related to the more familiar broad fish tapeworm of man, *Diphyllobothrium latum*. Unlike *D. latum*, egg-producing adults of *Spirometra* spp. are not found in man but in the intestines of dogs and cats (wild, domestic, and feral). Normally, the intermediate stages of spirometrid tapeworms are found in the tissues of small rodents, snakes, and frogs which are potential food items for the final definitive hosts. The term sparganosis (Gr. *sparganon* swaddling clothes) refers to the sparganum of plerocercoid larva which is usually slender and ribbon-like when found in patients in the United States. Under certain conditions man becomes an accidental host for the sparganum when exposed to those stages infective for the worm's intermediate hosts. As a rule, sparganum found in man are somewhat benign, living in adipose or connective tissue, and not producing severe pathology. However, cases have been reported with spargana invading the eye,¹ breast,^{2,5} brain,³ lung,⁴ epididymis,⁵ and urethra,⁶ as well as being found free in the peritoneum.³ Nodular formations by these worms have also been found in the jejunum⁷ and colon⁸ simulating adenocarcinoma. A rare metastatic form of sparganum is also known in humans which causes death by massive proliferation of the parasite throughout all host tissue except bone.⁹

Distribution of human sparganosis is world-wide with cases reported from Africa, Asia, Australia, Europe, North America, and South America.¹⁻¹⁰ Approximately 50 cases have been officially reported from the United States.¹¹ The majority of these were from the southern states with four infections having been associated with Arkansas. The purpose of this report is to present two new cases of sparganosis in Arkansas and to review the disease in order that physicians

in the state can be alerted to this potential health hazard.

The epidemiology of sparganosis can best be understood by first examining the life cycle of the tapeworm *Spirometra* sp. (Fig. 1).¹² The adult worms live in the intestine of a dog or cat. Operculated eggs are produced which pass out with the feces and hatch upon contact with water, releasing ciliated swimming larvae called coricidia. A coricidium is then eaten by a small invertebrate crustacean, barely visible to the naked eye, known as a copepod (*Cyclops* spp.). The ingested coricidium invades the hemocoel of the copepod and grows into a small worm-like form called a proceroid. The proceroid matures and the copepod is swallowed by the drinking activity of the vertebrate intermediate hosts. The proceroid penetrates the intestinal villi and is carried to adipose, connective or subcutaneous tissue to become the long and slender plero-

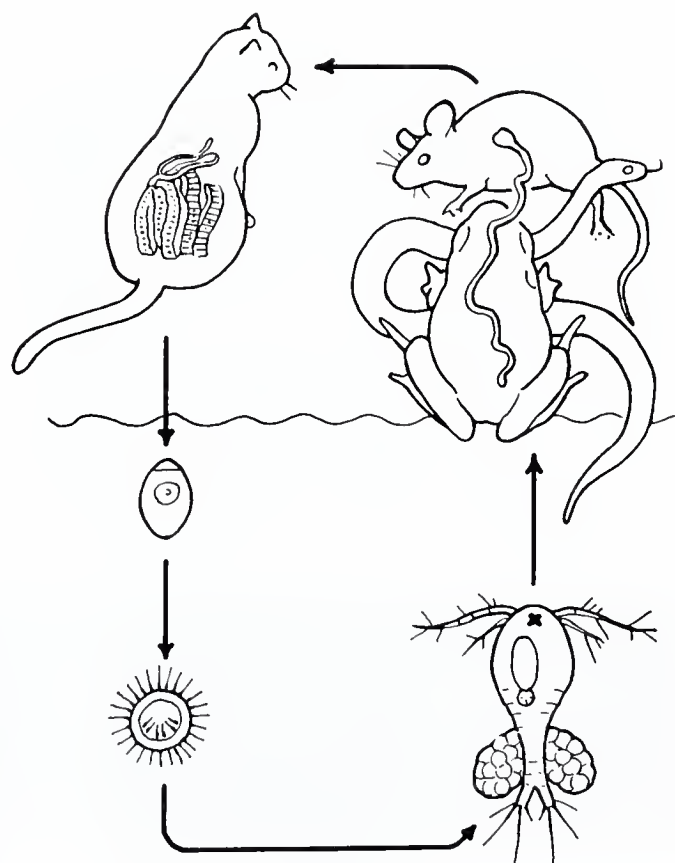


Figure 1.

The life cycle of the tapeworm, *Spirometra* sp. The adult worm is found in the intestine of a cat with the proceroid and plerocercoid larval forms infecting invertebrate and vertebrate intermediate hosts respectively. See text for detail. (From Mueller, J. F., The Biology of *Spirometra*. J. Parasitol. 60:3-14, 1974. By permission of the author.)

*Department of Microbiology and Immunology, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

**Department of Pathology, University of Arkansas Medical Center, Little Rock, Arkansas 72205.

***Department of Pathology, Baptist Medical Center, Little Rock, Arkansas 72202.

cercoid form. The cycle is completed when the tissue of this host is consumed by the final host and the plerocercoid is released to develop into the adult tapeworm.

Several routes of transmission in humans are known. The oriental practice of using infected frog flesh as poultices has caused sparganosis by the migration of the plerocercoids to the skin of the human and consequent invasion of new host tissue.¹⁰ In another fashion, plerocercoids eaten with the poorly cooked flesh of intermediate hosts can invade the human intestinal wall and migrate to internal tissues.^{10,12} Lastly, one can obtain the infection by swallowing the copepod infected with the proceroid by drinking contaminated water.¹²

CASE REPORT I

The patient, a thirty-year-old black male, presented in early 1974 with a nodule in the outer aspect of his right thigh. He stated that he first noticed the lump in 1969 but had disregarded it since it had caused him no distress or pain. The nodule was surgically excised and upon examination a white worm was found within the nodule. The worm was fixed in formalin and sent to the Department of Microbiology and Immunology, University of Arkansas Medical Center, where it was diagnosed as a sparganum (Fig. 2). The worm was 90 mm long and 1.0 mm wide. There were no distinguishing external morphological characteristics except that one end of the worm appeared to be more bulbous than the other. This lack of distinctive anatomical features is typical of spargana.

The nodule itself was 14 mm in diameter and composed of yellow, gray, and tan-colored soft tissue on the cut surfaces. Sections showed the cyst wall to be edematous with fibrous connective tissue intensely infiltrated by lymphocytes, histiocytes and plasma cells.

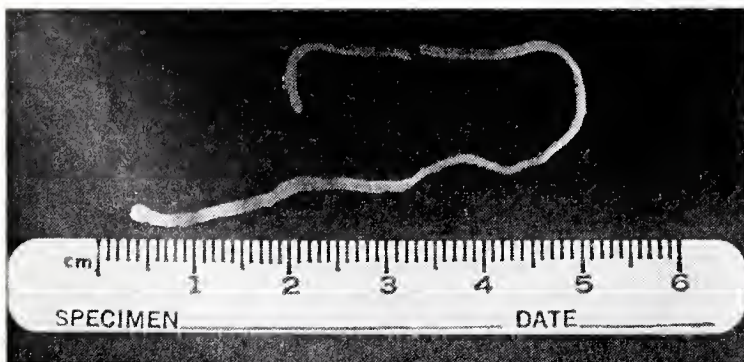


Figure 2.

Sparganum (plerocercoid larva) of *Spirometra* sp. taken from the nodule removed from the right thigh of patient I.

The patient has a wife and two children, none of whom have had similar symptomatology. The patient and his family have lived in Little Rock and Pine Bluff, Arkansas, since his marriage in 1967. During this time the patient and his family used only city-supplied drinking water. From 1966 to 1967 both the patient and his wife lived in the Fordyce area in southern Arkansas. The patient lived in the city proper while his wife-to-be lived in a rural area with her family's water supply coming from an open-dug well. The patient's wife stated that during the courtship period the patient drank water many times from the well. The wife could not, however, remember any member of her immediate family having had a nodule similar to her husband's. The patient's nodule was brought to the attention of a physician by the insistence of his wife, a trained nurse.

The patient was in the United States Army for several years with service terminating in September 1966. Nine months were spent in Vietnam in the Quartermasters Corps but to his recollection the patient had not drunk any water from sources other than military. The patient enjoys hunting and fishing when he has the opportunity but is not an avid outdoorsman. He prefers his meat cooked well done. No sequelae or new nodules have developed since surgery.

CASE REPORT II

On January 15, 1973, a suspicious tumor was removed from a thirty-year-old Caucasian male from a small town in eastern Perry County, Arkansas. The nodule was located in the upper left quadrant of the ventral side of the chest wall near the shoulder. The patient first noticed the nodule one and one-half years prior to its surgical removal. In the last five months the nodule made itself known by the presence of irritation and erythema. When the patient exercised vigorously the nodule appeared to increase in size, become red, and the associated pain was severe enough to restrict movement of the left arm and shoulder. Although the nodule swelled and receded in size intermittently, no migratory tendency of the tumor was noted.

The nodule was surgically excised and was an ovoid mass 19 mm in diameter. It was partly covered by an ellipse of skin and at the base there was adipose tissue. The cut section was firm, mottled, and yellowish grey and had the

appearance of a ruptured cystic structure with adjacent scarring.

The sections showed adipose tissue underlying a well formed skin. The subcutaneous adipose tissue showed large masses of leukocytes including polymorphonuclear white cells. There were areas of tissue destruction with necrosis. Within the abscess there were three distinct areas containing sections of the plerocercoid (or plerocercoids? — Fig. 3). Surrounding the area containing the worm(s) was necrotic debris and then more peripheral from the worms were plasma cells, lymphocytes, and histiocytes. The formation of fibrotic elements, and some infiltration of eosinophils were also found.

The larval sections showed an outer eosinophilic "cuticle" with an underlying row of subcuticular muscle fibers and nuclei of tegument cells. Within the worm there was a loose fibrillar network within which were thin-walled vascular (osmoregulatory) canals. Some concentric, basophilic staining calcareous corpuscles were also found within the worms. The latter are considered a characteristic of cestodes (Figs. 4 and 5).³⁷

The patient has lived in Perry County for his entire life with the exception of a year and one-half spent in Oklahoma six years before noticing the nodule. The patient was married with two children (ages 9 and 10). At the time of the interview the source of family drinking



Figure 3.

Cross section of nodule removed from the chest wall of patient II. Three areas can be seen containing sections of sparganum (hematoxylin and eosin).

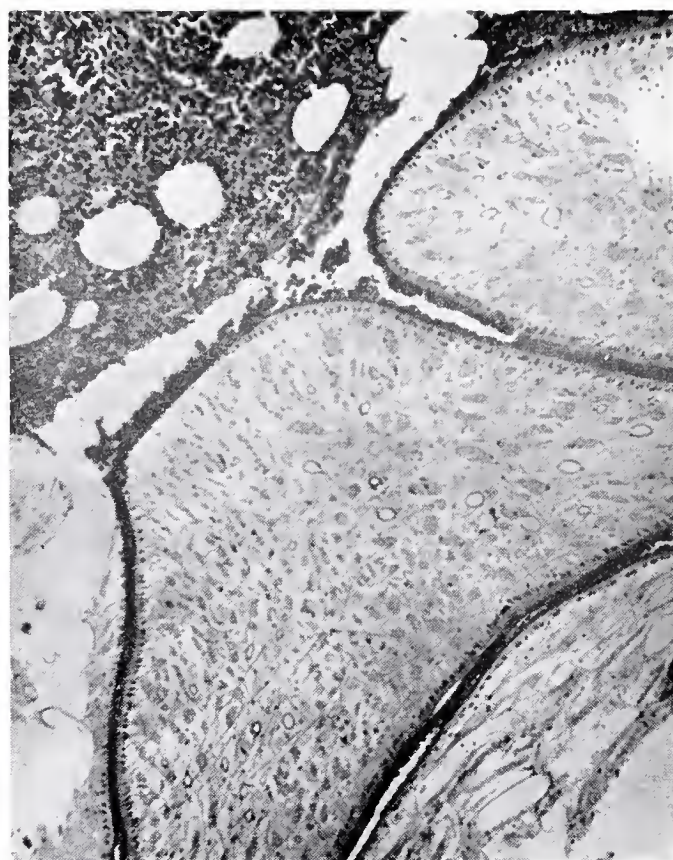


Figure 4.

Higher magnification of sparganum seen in Figure 3 showing the internal loose fibrillar network, osmoregulatory canals, and internal muscle fibers.

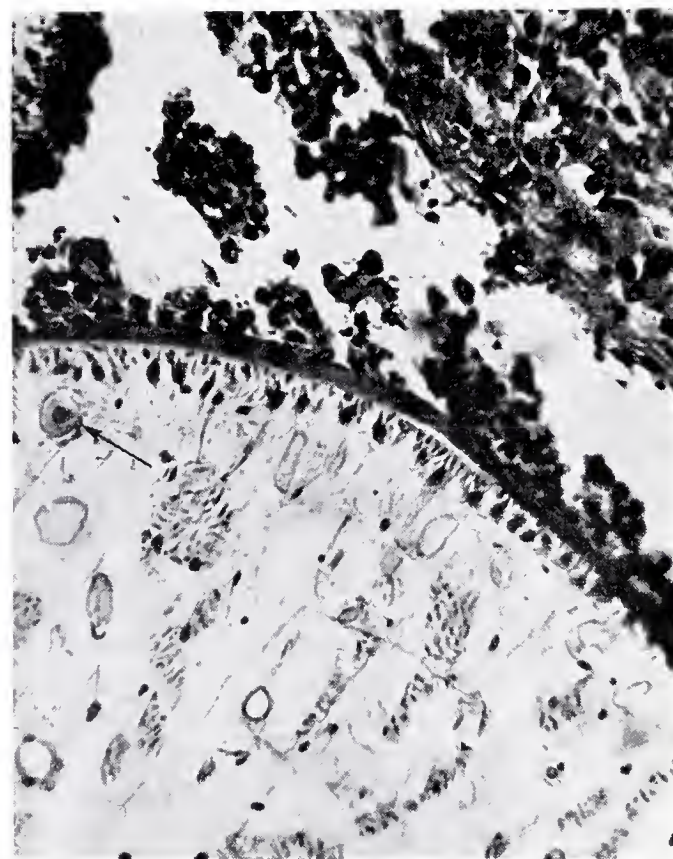


Figure 5.

The "cuticle" of the sparganum surrounded by necrotic debris. A basophilic calcareous corpuscle (arrow) can be seen in the internal tissue of the worm just beneath the "cuticle".

water was city-supplied. However, one year previous to the operation the family water was from an open-dug well. The patient's parents, also living in the same community, were still using a dug well.

The patient is an avid hunter and fisherman. He owned three hunting dogs and enjoyed "coon" hunting but did not have a taste for its meat. He also gigged frogs and liked fried frog meat. Preparation of his meat from wild game was done by frying and he preferred it well done. As an employee of a railroad gang he spent much time in semi-isolated rural areas of Arkansas in which there are clear mountain creeks, springs or run-offs. The patient has admitted to having drunk from these waters.

The patient's ten-year-old daughter had a history of removal of an ovarian tumor. An ectopic pinworm granuloma was secondarily present but no other evidence of parasites were seen. The wife of the patient also had a history of removal of an ovarian tumor but examination of sections showed no evidence of parasitic invasion. During the interview the patient's mother was found to have a subcutaneous nodule in the left medial supraclavicular area. This nodule was removed and was found to be an inclusion cyst negative for parasites. The patient's father also had a cyst, about the size of a hen's egg, between the shoulder blades on the back but he would not consent to its removal.

Because of the association of dug wells with sparganosis, well water from the patient's community was examined for copepods with the use of a plankton net. Five wells were seined: one well was used by the patient prior to conversion to city water, one well was still in use by the patient's family, one well was abandoned and apparently not in use, and two wells were in active use on a prosperous farm in the community. Copepods were found without difficulty in all five wells.

The plerocercoid in Case I and a section of nodule from Case II were sent to Dr. Justus F. Mueller, State University of New York, Upstate Medical Center, Syracuse, New York. The initial diagnoses of sparganosis were confirmed and the causative agents identified as *Spirometra* spp.

DISCUSSION

The discovery of human sparganosis is credited to Manson who described spargana from an au-

topsy of a patient in Amoy, China, in 1882.¹⁰ The first case in the United States was reported by Stiles in 1908 and is still one of the most interesting on record.⁹ The patient was a forty-eight-year-old fisherman from Manatee, Florida, who was literally eaten alive by thousands of the proliferating type of spargana previously mentioned. The organism was named *Sparganum proliferum*. Fortunately, this condition is rare with the last cases being reported by Tashiro in Japan in 1924.¹³ The adult of this form is unknown and the sparganum is considered by some to be an aberrant form of spirometrid which, for some unknown reason, converts from a normal non-proliferating plerocercoid to a metastatic one in human tissue. Mueller and Strano have recently discussed the possibility of an oncogenic virus as being responsible for the loss of morphogenetic control by the worm leading to the apparent uncontrolled growth of the metastatic spargana.^{14,15} The next case in the United States was reported by Moore in 1915 in Texas.¹⁶ A hiatus of thirty-eight years occurred with the next case reported by Read in 1952, also in Texas.¹⁷

Mueller and Coulston in 1941 implanted *Spirometra mansonoides* subcutaneously into their own arms and followed the course of the infection.¹⁸ This successful experimental human infection and the fact that *S. mansonoides* can be found as adult tapeworms in cats, dogs, bobcats, and raccoons in the eastern United States has led authorities to believe that *S. mansonoides* is the most probable etiologic agent of sparganosis in this country.^{19,20,21} Speciation can not be done with plerocercoids which must be fed to an uninfected kitten in order to retrieve the identifiable adult tapeworm. A second spirometrid, *S. mansoni* ("*S. erinacei*") is found in the United States only in Florida and belongs to a taxonomically confusing group of spirometrids ("*mansoni*" group) which causes sparganosis worldwide.^{12,14}

Until the early 1960's sparganosis was thought to be rare in the United States. But in the last decade many reports have appeared in the literature. Alabama,²² Arkansas,^{5,23,24} Florida,^{5,25,26} Georgia,²⁷ Louisiana,^{5,28} Mississippi,^{5,29} Missouri,²⁷ North Carolina,⁴ South Carolina,³⁰ Tennessee,²⁷ Texas,⁵ Virginia,³¹ and Puerto Rico⁵ have all had one or more reported cases of human sparganosis. The disease is not confined to the

South since two cases, one from New York²⁷ and the other from Wisconsin,³² indicate that the infection is also autochthonous to the northern United States. No states west of those mentioned have reported sparganosis with the exception of California in which the patient, a Filipino, presumably had contracted the infection outside the country.³³ Canada has also had a case but it was also not indigenous since the patient had recently arrived from Greece.¹¹ Reasons for the sudden increase in sparganosis in the last ten years are speculative but patients with a high risk factor for sparganosis are from "deprived" rural areas where medical facilities have not been adequate and the patients were not inclined to seek professional medical care unless acutely distressed. In the past fifteen years migrations to urban areas, rapid transportation and public concern for rural health have presumably reduced these factors and increased the possibility for diagnosis. Also, it has been pointed out that the campaign for early cancer detection has probably caused prospective patients more concern about suspicious "lumps".⁵

The first cases of sparganosis in Arkansas were reported by Cross in 1963 from a forty-six-year-old mother and her eleven-year-old son.²³ These residents of Conway County were seen at the UAMC clinic in Little Rock for lower abdominal pains. Nodules containing sparganum were removed at different times from both these patients. Both had admitted to drinking water from streams and ponds in Arkansas. The family routinely used a drilled well but an examination of its water revealed no copepods present.

Two more cases from Arkansas were mentioned by Swartzwelder et al. in 1964 but with few details. One patient from "Arkansas-Texas" was found at Charity Hospital, New Orleans, Louisiana, to have had a sparganum in a nodule removed from the calf of the right leg.⁵ A middle-aged black female resident of Chicago who had immigrated from southern Arkansas twenty years previous was found with a sparganum in her right breast in 1966.²⁴ The patient had drank from natural waters before she left the state but did not do so on her return visits to Arkansas.

The exact route by which a patient has acquired sparganosis or the longevity of the infection may be difficult to ascertain exactly.

Many years may lapse from the time of exposure to when the worm gives notice of its presence. Mueller has shown that larvae may survive to produce normal adult tapeworms after sixteen years continuous passage as plerocercoids in mice.¹² Some nodules in humans have been observed for as long as eight to twelve years and some nodules have been found with dead worms in an advanced state of degeneration.⁵ In some cases, sparganum nodules have been found to migrate and also to disappear and reappear several times.^{24, 27, 29}

Accidental ingestion of the proceroid is thought to be the usual route of infection in the United States. Most patients have had a history of drinking water from sources that would contain copepods. Americans, as a rule, do not indulge in exotic cuisine that has been associated with transmission of sparganosis elsewhere by directly ingesting the plerocercoid; e.g. eating raw snake meat in Korea (for medicinal purposes),³⁴ poorly-cooked chicken in Japan,³⁵ and tadpoles in Vietnam.³⁶ Corkum, however, has reported a case in Louisiana that could not be related to ingestion of infected copepods.²⁸ The patient had a history of eating poorly cooked meat (home made sausage and wild game). Corkum found, experimentally, that young pigs could be infected with plerocercoids and that food items for the patient's family included such animals as raccoon, opossum, and frogs which contained plerocercoids of *S. mansonioides*. The conclusion was that ingestion of plerocercoids might be the important route of human infections in that part of the southern United States.

In summary, physicians should be aware that nodules found in patients from rural areas of Arkansas could be due to infection with these tapeworm larvae. Diagnosis is usually only possible after surgical excision which is also the only practical remedy. Removal of the nodule or incision of the nodule and expression of the worm should be given serious consideration in light of the worm's migratory tendencies and the unknown etiology of the proliferating type of sparganum.

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Office Orthopaedics

Examination of the Injured Hand

R. Barry Sorrells, M.D.*

Hand injuries, their evaluation, and their management often present a source of concern to the examining physician and surgeon. The complex anatomy and inter-relationship of the intricate structures in this finely designed and functioning apparatus may seem overwhelming to the doctor who only occasionally is called upon to diagnose and outline treatment for the person with a hand injury. The exact function of the flexor digitorum profundus tendon and its route in the wrist and hand may become confused with its companion tendon, the flexor digitorum sublimus. The doctor may need to refresh his memory as to the sensory distribution of the radial nerve in the hand. He may not remember whether flexion of the proximal phalanx is accomplished by the intrinsic muscles, the flexor sublimus tendon — or is it both?

It is the intent of this paper to outline a systematic approach to an examination of the injured hand. Once accomplished, an appropriate treatment plan, consultation request, or referral can be instituted.

GENERAL CONSIDERATIONS

Obviously, prior to hand examination, other more pressing problems must be evaluated and treated, blood loss controlled, and pain at least ameliorated. Ideally the patient should not be obtunded with medication as his cooperation is essential if a thorough evaluation is to be conducted. Gentle cleansing of the hand is carried out and obvious debris removed. Asepsis is mandatory and sterile gloves and drapes are used to

prevent introduction of additional contamination in the acutely injured hand.

SKIN

The condition of the skin is noted. Debridement may be necessary. The problems of closure, either primary or by skin grating, must be constantly kept in mind. Split thickness skin grafts, full thickness free grafts, or pedicle flaps may be necessary depending on the amount and location of the skin loss. The palmar skin and that over bones, tendons, and nerves, must be thick and well padded; split grafts may work in other areas. Primary plastic procedures such as Z-plasty may prevent future scar contracture and deformity as a residual of improper primary closure of the skin.

BONES

X-rays should be made if there is any chance at all of bone injury. The bones of the hand must be well aligned for proper function and very little deviation from the normal is accepted. Closed or open reduction, frequently with pin fixation, may be necessary to assure the accomplishment and maintenance of adequate position and alignment of the fractured bones. The intricate finger joints will accept little intra-articular malalignment without disability.

TENDONS

Evaluation of tendon injury presents the majority of the problems encountered by most examining doctors. As previously stated, the terminology and tendon inter-relationships are complex, especially when depicted in anatomy texts. This, however, can be simplified.

*Little Rock Orthopedic Clinic, P.A., Post Office Box 5270, Little Rock, Arkansas 72205.

Observation: First of all look at the hand. At rest, there is partial flexion at all finger joints (approximately 45 degrees). The hand is "balanced" about half-way between maximum flexion and extension. Look at your own hand at rest! (Figs. 1 and 2.) The finger with severance of an extensor tendon will rest in a position of greater flexion than its neighbors. The finger with a severed flexor tendon will rest in extension. (Fig. 3.) But beware! Remember there are two flexor tendons and only one may be injured — more about that later.

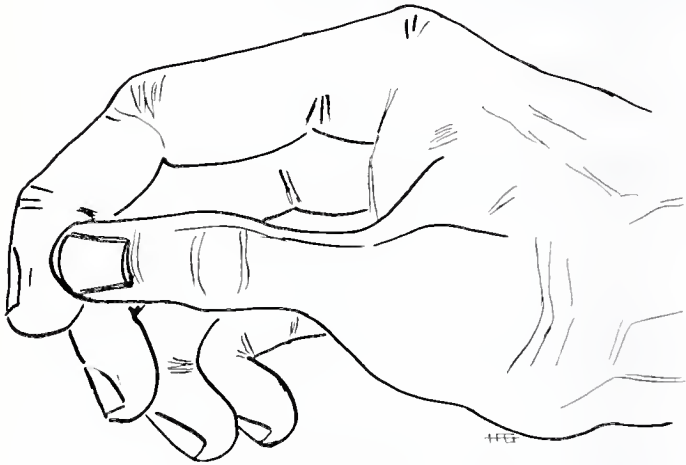


Figure 1.
Normal posture of resting hand.

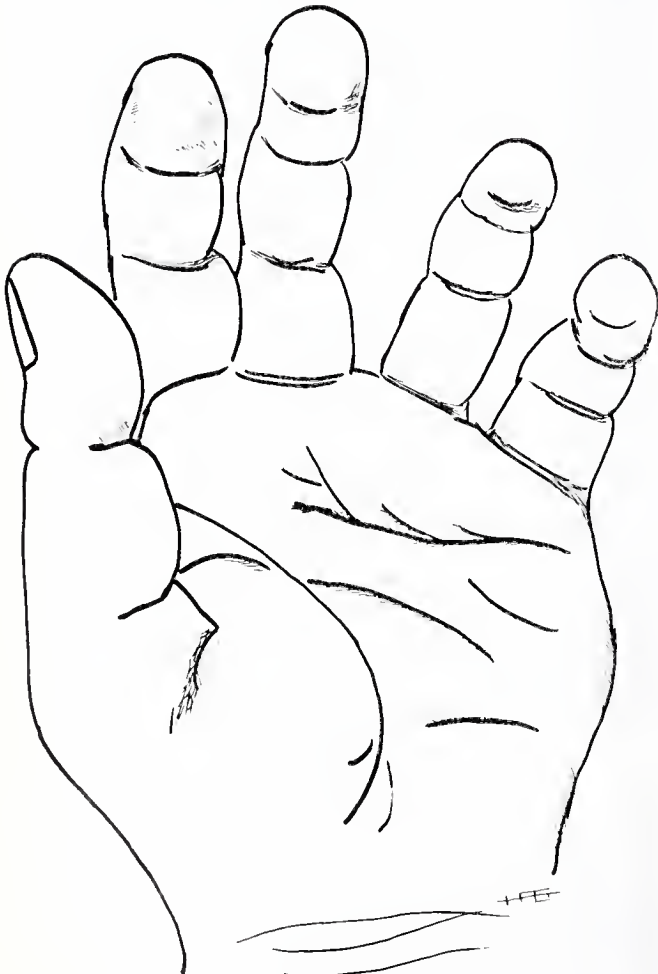


Figure 2.
Normal posture of resting hand.

Obviously, one is influenced by the injury site and tends to make his diagnosis accordingly. This may be misleading, however, since the skin is often lacerated at one level and the gliding tendon lacerated at another level. Functional examination is therefore necessary.

Extensor Tendons: In the presence of normal bony architecture, an extensor tendon can be assumed to be severed between the proximal and distal interphalangeal joints when active extension of the latter (DIP) joint is lost. Complete division of the extensor mechanism between the metacarpophalangeal joint (MCP) and proximal interphalangeal joint (PIP) results in complete loss of finger joint extension at the PIP and DIP levels. Confusingly, however, with partial division of the central portion only, between the MCP and PIP joints, DIP joint func-

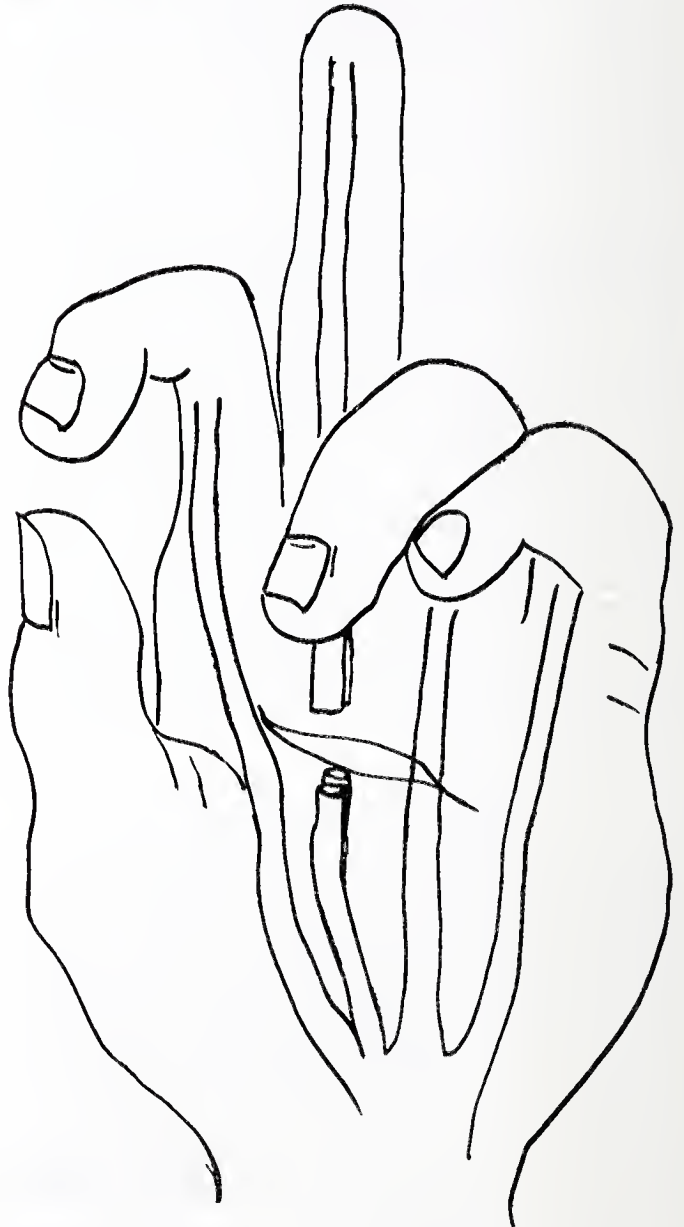


Figure 3.
Resting posture of long finger with severance of flexor tendons.

tion may remain from the action of the remaining lateral slips which can dislocate volarly and extend the distal joint. Therefore, a partial laceration at this level may result in loss of PIP joint extension only. To further confuse the examiner, it is possible that complete laceration of a single extensor tendon at dorsal hand or wrist level may still result in partial extension of all finger joints. This is due to the action of the vinculae, the communicating slips between the extensor tendons on the dorsum of the hand. (Fig 4.) But, the extension is usually weak and incomplete at all joint levels!

Extension of the thumb involves only the MCP and interphalangeal joint (IP) since there is one less bone and one less joint in the thumb. The examiner stabilizes the MCP joint and the patient attempts active extension at the IP joint. Lack of extension indicates severance of the long extensor tendon of the thumb (extensor pollicis longus); the ability to extend indicates its integrity.

Flexor Tendons: There are two flexor tendons for each of the fingers; the flexor digitorum profundus and the flexor digitorum sublimus. Remember the profundus—"profound"—is "deep" and goes to the end; the sublimus—"sublime"—is "lofty" and stops short of the end

(on the middle phalanx). When the profundus tendon is severed between PIP and DIP level there can be no active flexion of the DIP joint. When both tendons are severed between MCP and PIP level, there is no flexion at either PIP or DIP joint. When the laceration is in the palm, the MCP joint is stabilized by the examiner (this blocks the intrinsic muscles) and still no PIP or DIP active flexion occurs—this also indicates severance of both tendons.

The diagnostic problem arises when only one flexor tendon is severed. Since it is most superficial in the palm and the proximal finger, the sublimus (frequently called superficialis) is most often injured in single tendon injuries.

A simple differential maneuver requires stabilization of individual joints by the examiner. The flexor profundus tendon is presumed severed when the DIP joint cannot be flexed while the PIP joint is stabilized. (Fig. 5.) To demonstrate division of the sublimus tendon without that of the profundus, the two adjacent fingers are held in complete extension. This maneuver anchors the profundus tendon in the extended position and prevents its flexing the PIP joint. Thus when the sublimus tendon is severed and the two adjacent fingers are held extended, flexion of the proximal interphalangeal joint is impossible. Conversely, the ability to actively flex the PIP joint with the adjacent fingers extended indicates integrity of the sublimus tendon. (Fig. 6.)

Flexion of the thumb is tested in the same manner as thumb extension. The MCP joint is stabilized and active flexion attempted. An inability to flex at the IP level indicates severance of the long thumb flexor tendon (flexor pollicis longus).

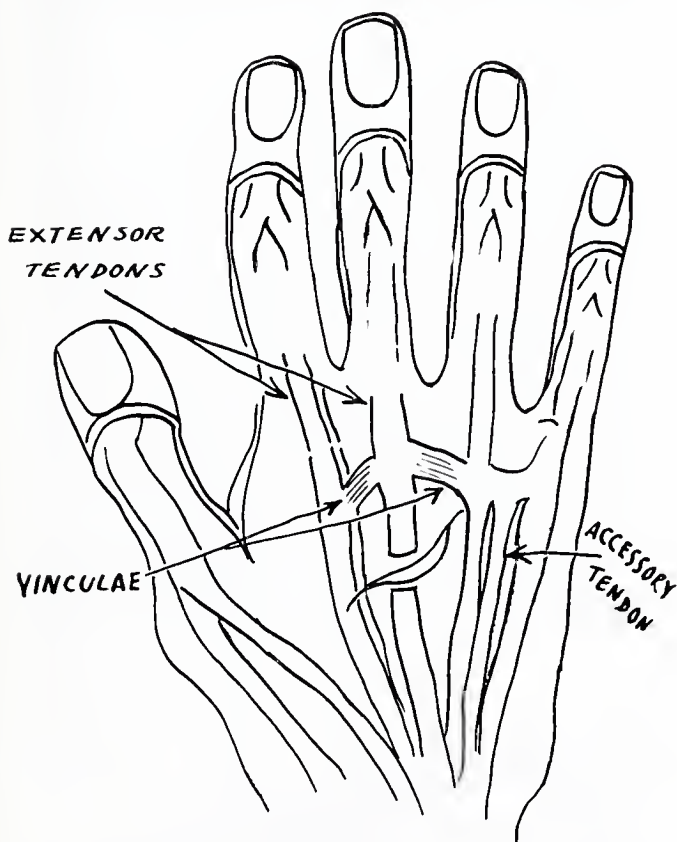


Figure 4.

Severance of extensor tendon proximal to vinculae. Weak, incomplete, extension remains.

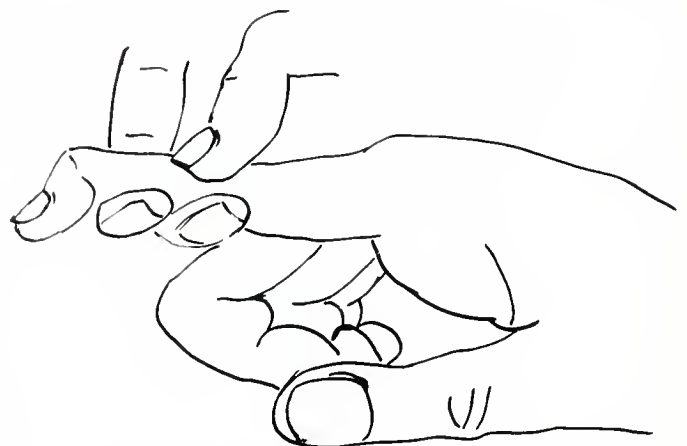


Figure 5.

Testing the intact flexor digitorum profundus tendon.

WANTED: Internist or General Practitioner interested in full or part-time employment in a chronic disease hospital with emphasis on rehabilitative medicine. Associated with University Medical School. Vacancies are available in both outpatient and hospital staff positions. Many patients have both chronic diseases and psychiatric illnesses. Pleasant climate; near recreation areas. Licensure in any state and possession of U. S. citizenship or permanent visa required. An equal employment opportunity employer. Contact K. I. Graupner, M.D., Chief, Medical Service, VA Hospital, North Little Rock, Arkansas 72114, or call (501) 372-8361, ext. 606.

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Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

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Overdosage may cause a curare-like action, with loss of voluntary muscle control.

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Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

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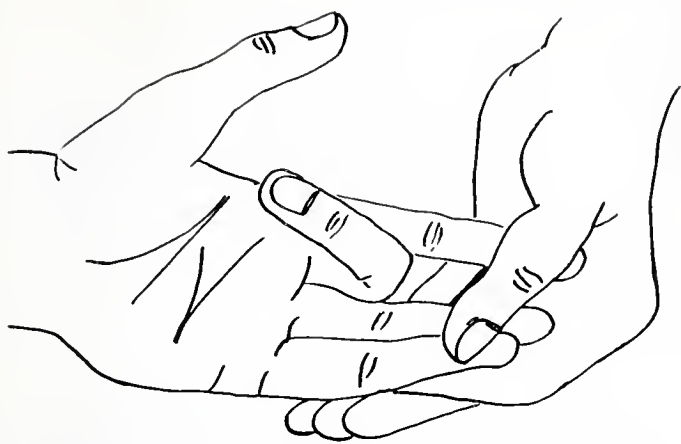


Figure 6.
Testing the intact flexor digitorum sublimus (superficialis) tendon.

NERVES

Nerves should be tested for both sensory and motor function. Many anatomical variations occur, but certain innervations are more or less constant and generally reliable.

Sensory: Finger and thumb injuries can result in digital nerve impairment and can be tested at the digit's tip, on the medial and lateral sides since there are two digital nerves to each finger and thumb. More proximal injury can be tested in the "autonomous" distribution of the three major nerves to the hand — median, ulnar, and radial.

Sensation at the tip of the index finger indicates integrity of the sensory portion of the median nerve. Sensation at the tip of the small finger ascertains the ulnar nerve sensory function; and acuity in the thumb-index web space on the dorsum generally indicates the sensory portion of the radial nerve is functional. (Figs. 7 and 8.)

Motor: There are many muscles within the hand, the innervation is either by ulnar or median nerve, but much variation exists. Generally, however, if the tip of the thumb can be actively opposed to the tip of the middle (long) finger and a round "O" formed, the motor portion of the median nerve is presumed intact. If the patient can spread the fingers apart, then move the middle (long) finger from the ulnar to the radial side (active abduction) while the palm rests on a flat surface — the ulnar nerve motor function is intact. If while the wrist is extended, extension of the MCP joints of the fingers and thumb can be accomplished, the radial nerve probably is intact.

SUMMARY

Examination of the injured hand can be read-

ily accomplished and a diagnosis established with a great deal of accuracy by the following:

- I. Skin: Examine extent of injury and consider methods of closure and coverage.
- II. Bones: X-ray and remember necessity of anatomic position and alignment.
- III. Tendons: Observe attitude of hand at rest.
 - A. Long Extensor Tendon Laceration:
 1. Between PIP and DIP joints — no active extension of DIP joint

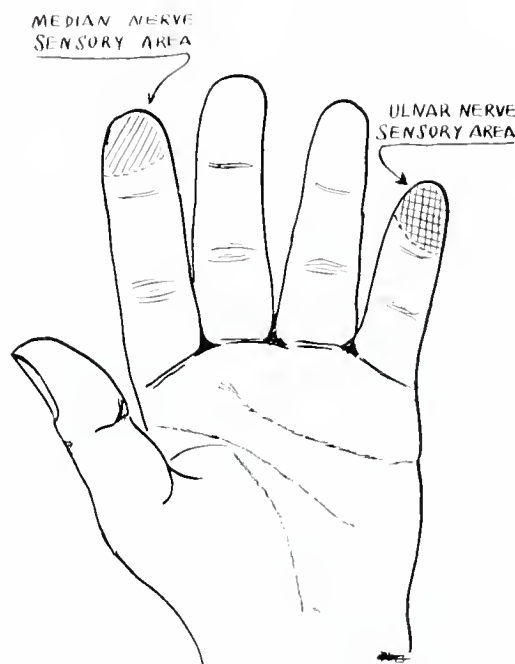


Figure 7.
Autonomous sensory areas for median and ulnar nerves.

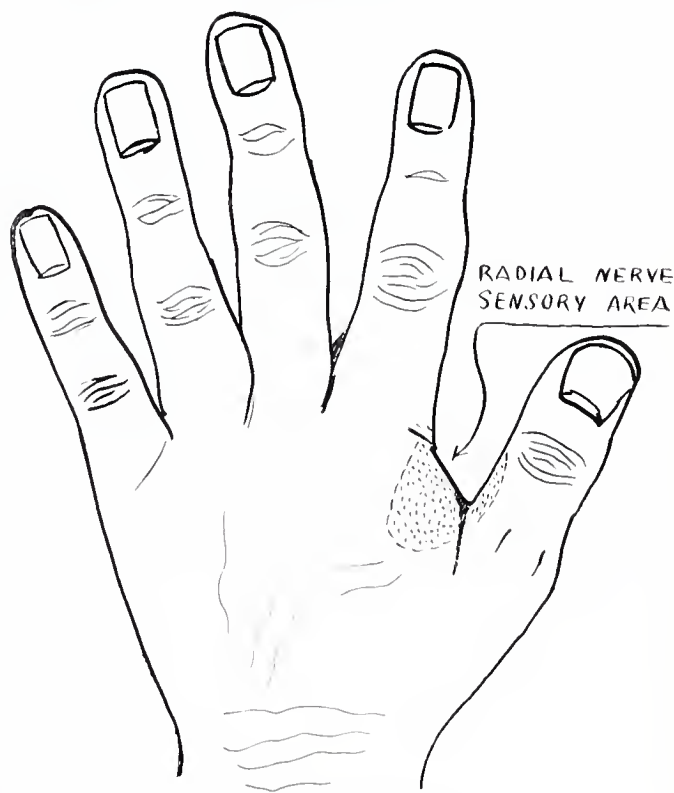


Figure 8.
Autonomous sensory area for radial nerve.

2. Between MCP and PIP joints
 - (a) Complete — no active extension of PIP or DIP joints
 - (b) Partial — no PIP active extension but DIP extension may remain
3. Wrist or dorsal hand level — extension may remain at all joints, but will be weak and incomplete
4. Thumb — no IP joint extension if the MCP joint is stabilized by the examiner

B. Long Flexor Tendon Laceration:

1. Flexor profundus and sublimus together:
 - (a) Between MCP and PIP joints — no active flexion at PIP or DIP joints
 - (b) In palm — no active flexion at the PIP or DIP joints if the MCP joint is stabilized by the examiner
2. Flexor profundus alone — no active

flexion of the DIP joint when the PIP joint is stabilized

3. Flexor sublimus alone — no active PIP joint flexion when the adjacent two fingers are stabilized in extension
4. Thumb — no IP joint flexion if MCP joint is stabilized

IV. Nerves

A. Sensory

1. Median — tip of index finger
2. Ulnar — tip of small finger
3. Radial — web space on dorsum — between thumb and index finger

B. Motor

1. Median — active opposition (“O”) thumb and long finger
2. Ulnar — active abduction of long finger with palm on flat surface
3. Radial — active extension of MCP joints of fingers and thumb with the wrist extended

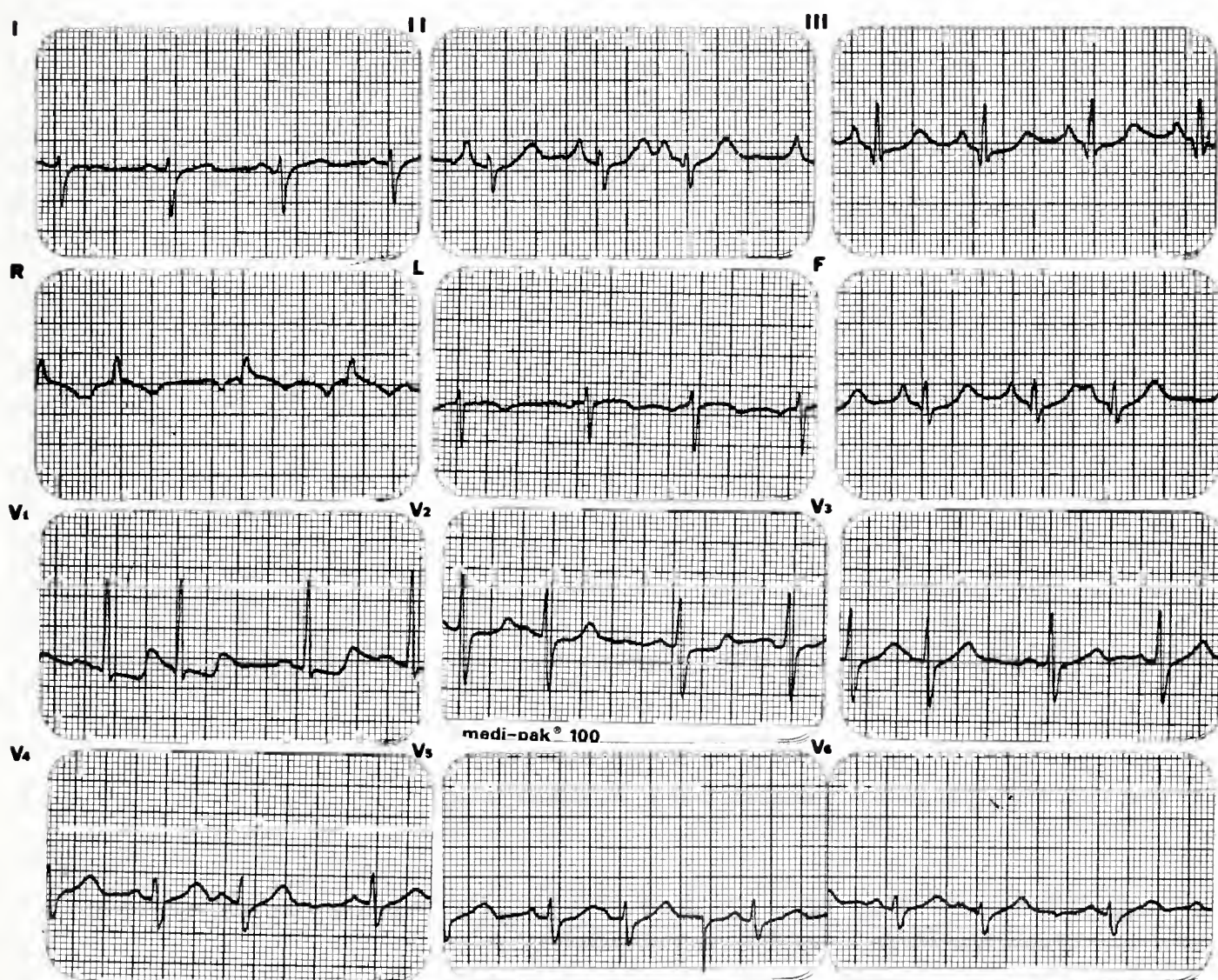




The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 413)

A 47-year-old male patient developed symptoms of easy fatigability and some dyspnea, which developed within the past five years and have slowly progressed. Examination revealed a harsh ejection type systolic murmur at the left base with a diminished P2. He was not cyanotic. His electrocardiogram is shown.



Robert T. Bulloch, M.D.
Professor of Medicine
Chief, Cardiology Section
University of Arkansas Medical Center
Little Rock, Arkansas 72205



Childhood Lead Poisoning

Mrs. Ruth Blackwood*

In the history of modern medicine, few childhood diseases occupy a position as unique as lead poisoning. Silently, almost unnoticed, it causes needless death of many children and leaves many more with mental retardation, cerebral palsy, convulsive seizures, blindness, learning defects, behavior disorders, kidney diseases, and other handicaps.

Childhood lead poisoning is a disease that health workers may not recognize because it has no distinctive clinical features. The symptoms of childhood lead poisoning are nonspecific. Anemia, listlessness, excessive irritability, loss of appetite, abdominal pain, constipation — signs and symptoms that appear before obvious evidence of encephalopathy, such as vomiting and convulsions — can all be misinterpreted as indications of some other illness. Because children who suffer from lead poisoning are usually from lower income families, their anemia may be considered to be the results of inadequate nutrition; their listlessness and excessive irritability to be symptoms of indigestion or gastroenteritis. Even convulsions may be regarded as signs of epilepsy rather than as evidence of lead encephalopathy.

Routine physical examinations, blood count, and urinalysis will not provide an unsuspecting health worker with a correct diagnosis. Unless the worker inquires specifically whether the child has eaten chips of paint or plaster and draws a blood specimen for lead determination, he is likely to miss the diagnosis altogether and treat the child for some other condition, only to be confronted later by the same child who may then exhibit symptoms of irreversible brain damage.

According to testimony at Senate hearings, the "silent epidemic" of lead-based paint poisoning

annually claims the lives of about 200 children. While more than 12,000 children are thought to be treated by doctors and hospitals each year for lead poisoning, estimates are that for every child treated, 25 are injured, perhaps permanently, but never treated.

Added to the great suffering this health hazard inflicts on children and their families is the economic burden on society. The cost of lifetime treatment and institutionalization of a person who incurs severe permanent brain damage, not counting the loss of his earning power, is between \$222,000 to \$250,000.

Nobody knows how many children in the U. S. are exposed to this health hazard and how many are actually poisoned, for many cases of lead poisoning are never diagnosed. But since the problem is closely related to poor housing conditions, an educated guess may be made on the basis of the number of old deteriorating houses and the known prevalence rate of lead poisoning among children living in such houses. According to a survey by the Sanitarian Services of the Arkansas Department of Health, approximately 70% of the housing in Arkansas is over twenty years old. Many of the older homes are deteriorating and others are classified as dilapidated.

There is then obviously a need for a program to detect and treat childhood lead poisoning in Arkansas. One approach is through programs for mass screening of children for an undue body burden of lead. Here the target population is the susceptible child from one to six years old. The age and condition of their housing should also be considered.

The Arkansas Department of Health has been awarded a federal grant for Childhood Lead Poisoning Control—Screening. Funds were made

*Public Health Education Supervisor, Blood Lead Program, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

available under Public Law 93-151 for the statewide project operations.

It is the program objective to screen children under six years of age who are living in old poorly maintained housing, as well as those exposed to special local conditions which involve lead hazards. The Arkansas Blood Lead Program will, through local PHN, refer children found to have elevated blood lead levels to a medical center for diagnostic testing and any treatment that may be necessary. In order to prevent re-exposure of

the children, the lead paint hazard will be located and removed from every dwelling where poisoning has occurred. To insure against re-occurrence, follow-up and retesting will be provided for those children found to have high blood lead concentrations.

For further information on lead poisoning, contact Burvie H. Sheets, Administrator, Blood Lead Program, Bureau of Environmental Health Services, Arkansas Department of Health.



RESOLUTIONS



M. J. Kilbury, Sr.

WHEREAS, the recent death of M. J. Kilbury, Sr., M.D., is noted by the members of the Pulaski County Medical Society with sincere sorrow; and

WHEREAS, Dr. Kilbury was an esteemed member of this Society for more than forty-six years; and

WHEREAS, his contribution to the progress of the organization, in his service as President and in a variety of responsibilities throughout the years, is recognized with grateful appreciation;

BE IT THEREFORE RESOLVED:

THAT, we express our sincere sympathy to Dr. Kilbury's family by entering this resolution as a part of the permanent minutes of this Society; and

THAT, a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication; and

THAT, a copy be forwarded to Dr. Kilbury's family.

By Direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
Henry Hollenberg, M.D.
Robert Watson, M.D.

Joe H. Sanderlin

WHEREAS, the members of the Pulaski County Medical Society note with sincere sorrow the death of their colleague, Dr. Joe H. Sanderlin, and

WHEREAS, Dr. Sanderlin had given more than generously of his time to the affairs of the Society, serving in a number of its offices and as its President; and

WHEREAS, Dr. Sanderlin's reputation with his patients and with the community was one of outstanding consideration;

BE IT THEREFORE RESOLVED:

THAT, a copy of this resolution be sent to Mrs. Sanderlin as an expression of our sincere sympathy; and

THAT, this resolution be made a part of the permanent minutes of this Society; and

THAT, a copy of this resolution be sent to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
Henry Hollenberg, M.D.
Robert Watson, M.D.

Bryce Cummins

WHEREAS, the recent death of Bryce Cummins, M.D., is noted by his colleagues with sincere sorrow; and

WHEREAS, Dr. Cummins has been an esteemed member of the Pulaski County Medical Society for forty-seven years; and

WHEREAS, his contribution to this organization and to the community through unselfish

dedication to the health needs of his patients is immeasurable;

BE IT THEREFORE RESOLVED:

THAT, this resolution be made a part of the permanent records of this society; and

THAT, a copy of this resolution be forwarded to Mrs. Cummins as an expression of heartfelt sympathy; and

THAT, a copy be made available to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee

T. Duel Brown, M.D., Chairman

Henry Hollenberg, M.D.

Robert Watson, M.D.

Thomas Nathaniel Black

BE IT RESOLVED that the Garland County Hot Springs Medical Society pay special tribute to our recently departed member, Dr. Thomas Nathaniel Black.

Dr. Black received his medical degree from Tulane University in 1918. He finished at the top of his class and was elected to membership in Alpha Omega Alpha in reward for his scholastic achievements. He was highly successful, both professionally and in business. As a result of his attractive personality and generousities, he acquired a host of devoted friends. One is reminded of the saying, "To have a friend, one must be a friend." He was indeed a true friend.

We wish to express our deep sorrow to his wife, daughters, and his many friends.

BE IT FURTHER RESOLVED that a copy of this Resolution be sent to his wife and family, to the State Medical Journal, to the local press, and be spread on the minutes of the society.

Garland County Medical Society

Edgar K. Clardy, M.D., President

Thomas P. Thompson, Jr., M.D., Secretary

Gaston A. Hebert, M.D., Chairman,

Resolutions Committee



EDITORIAL

Menstruation-An Intracellular Chemical Reaction

Alfred Kahn, Jr., M.D.

The public at large is increasingly aware of the progress of physicists in probing matter. The Greeks postulated that there had to be atoms, which was proved much later. As everyone knows, research in physics has begun to investigate sub-atomic particles. This has been made possible by the development of new tools such as the giant accelerators now being operated; they handle energy levels measured in billions of electron volts and they are seeking particles as mesons, etc. Perhaps these studies

will demonstrate the building stones of matter — but they may be just a way-station en route.

Medical science has pursued a somewhat parallel course. The great anatomists and pathologists used to think of cells as the building stone of the body. Their limited view of the cell interior with the light microscope did not permit resolution of much besides the cell nucleus. The advent of the electron microscope, better micro-chemical techniques, and techniques for separation of sub-atomic particles. These ad-

vances soon led to an astounding article relating thyrotoxicosis to disease of the mitochondria. Now days, research is being ovented to sub-cellular organelles and this is no longer the tour de force of the original studies.

Our relative ignorance of the functions of sub-cellular organelles is gradually being replaced by some knowledge and there are some areas in which one can speculate with a little more assurance. The Journal of Clinical Endocrinology and Metabolism (Henzl, Smith, Boost, and Tyler — Volume 34, Page 860, May, 1972) contains an article entitled "Lysosomal Concept of Menstrual Bleeding in Humans." This represents a quantum step forward in thinking from the old ideas pertaining to menstruation which stopped at the inter-relationships between FSH, L.H., estrogens, and progestins.

Henzl et al were struck with the remarkable proliferation and regression of endometrial tissue; they felt that acid hydrolase enzymes might account for the rapid regression of the cells of the unfertilized endometrium. They used cytochemical stains and the electron microscope. They took endometrium from two groups of women: those with sterile marriages and those with previous pregnancies. The women were studied in five phases: proliferative, post-ovulatory, mid-secretory, late secretory, and early menstrual.

Of particular interest was the golgi apparatus. In the proliferative phase, the golgi cisternae layers became dilated and there is a progressive release of golgi vesicles. The vesicles stain positively for acid phosphatase. The lysosomes are dense and seem to spread in distribution as time goes by from the cell base to the entire cell.

The epithelial cells in the secretory phase reveal a golgi apparatus with distention of the outer cisternae; there are many golgi vesicles with acid phosphatase; Lysosomes show intense reaction for acid phosphatase. Later, the authors find in the mid secretory phase there are acid phosphatase reactions on the lateral plasma membranes. The golgi apparatus shows marked distention and many vacuoles. In the very late secretory phase, the golgi systems get smaller; there are many large secondary lysosomes very strongly reactive for acid phosphatase. There is evidence of degeneration of glycogen and there is a marked acid phosphatase staining of the

lateral cell membranes; there is evidence of enzyme reaction between cells. Eventually, the cells vacuolate and the organelles are crowded into the base of the cell — the apices are often open. The acid phosphatase reaction of the junctional tissues become prominent in the secretory phase.

Henzl et al state that the most striking shifts in acid phosphatase are in the late secretory phase and they consist of acid phosphatase staining of junctional tissues, "swelling of arteriolar endothelia, and the finding of reaction product in arteriolar basement membranes." They believe that these changes inside the cells described above show that the breakdown of the endometrium is due to these autolytic enzymes. They do not feel the enzymes are released directly into the cell. Thus killing the cell. Instead these lysosomal enzymes seem to be membrane bound particles that go to the cell surface. The enzymes are also thought to destroy the basal lamina and the intercellular connections.

These enzymatic changes seem to be under control of the hormones which affect the uterus.

Thus the author's point is that under the changing hormonal pattern the intracellular enzyme concentration and localization go through changes which enable them to destroy the cell; on a large scale, this in turn leads to menstruation.

This is not the ultimate study in this area as there are many complex chemical reactions inside the cell which are as yet unraveled and which play important roles in the function of the body.



ANSWER—Electrocardiogram of the Month

The ECG shows right axis deviation. The primary finding is the presence of tall R waves in the right precordial leads (V1, V2) and persistent S waves across the entire precordium. The P waves in II, III and AVF are tall and peaked. There are frequent atrial contractions present.

Diagnosis:

Right ventricular hypertrophy. Probabilities include pulmonary valve stenosis; Tetralogy of Fallot is less likely. If no murmur had been present, other possibilities such as Eisenmenger's complex, primary pulmonary hypertension or recurrent pulmonary emboli would be a consideration. Chronic lung disease or mitral valve disease with pulmonary hypertension can present in this manner.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The American Medical Association has submitted to the 94th Congress a new proposal for national health insurance (NHI).

In the parade of would-be NHI legislation before the new Congress, the medical profession's plan is the only major proposal to have been substantially revised from the offerings of previous years.

The measure is designed to provide full health care for all through private health insurance (with the exception of Medicare beneficiaries) including catastrophic illness protection.

The principal features:

- Mandated employer coverage.
- Coverage for the self-employed and unemployed with a subsidy for premium costs for those self-employed with low incomes.
- Supplemental coverage plus subsidized premium for Medicare beneficiaries in order to equalize benefits.

The major difference between the mandated plan and the Medigap bill endorsed by the AMA in the last Congress is that the bulk of the government financing relies on general revenues rather than on tax credits, although the tax credit principle is retained for the self-employed.

Despite the 186 sponsors that backed the AMA's Medigap plan last year — the largest body of support for any NHI measure including that of labor — considerable Congressional resistance developed to tax credits as a financing base.

Under the revised AMA proposal, most people would receive health care protection under a mandated employer program fully financed by premiums paid by employers and their employees. Participation would be optional for employees. At least 65 percent of the premium would be payable by the employer.

The former Medigap principles would apply to insurance for the jobless and the self-employed. The individual or family would buy "qualified health care insurance," that is, insurance which meets federally established standards of benefits and policy conditions, and for those whose income falls within a defined subsidy level, the federal government would contribute towards the cost of the premium on a scale related to income.

Government contributions to premiums would be in the form of a credit against income tax or a certificate of entitlement issued by the government and acceptable by the insurer for payment of premium. An individual or family subsidy in any year would be based on its income (measured by income tax liability) for the preceding year. Limited income individuals or families having no tax liability would be entitled to a tax credit (or certificate) for the full amount of the insurance premium. For other eligible persons, the entitlement would range from 10 percent to 99 percent of the premium.

Non-employed Medicare beneficiaries would be eligible for federal subsidy for premiums for "qualified supplemental coverage" designed to equalize the available benefits for the elderly as for all others. Such supplemental insurance would be the same as the full insurance policy for persons under 65, but would contain a clause for exclusion of all benefits obtainable under Parts A and B of Medicare. The supplemental insurance would not cover deductibles and co-insurance under Medicare but would require no deductible or coinsurance payments for the supplemental benefits.

The plan provides for continuation of an employee's insurance following termination of employment. Such insurance would be fully paid from a special fund created from general revenues to cover periods of unemployment.

The catastrophic coverage provision requires

no deductible. Coinsurance would apply at a rate of 20 percent on the cost of all covered benefits, within a ceiling limit. The poor would pay no coinsurance, and for others, the coinsurance maximum would be 10 percent of the individual or family income, reduced by an "exclusion base." The amount of such exclusion would vary according to family size, and would be set at \$4,200 for a family of four. Thus a family of four earning \$15,000 would have a coinsurance limit of 10 percent of \$10,800 (\$15,000 less \$4,200, or \$1,080). In no case, however, could coinsurance for a year exceed \$1,500 for an individual or \$2,000 for a family.

The ceiling on coinsurance would trigger catastrophic expense protection. All benefits under the insurance policy would thereafter continue for the remainder of the policy with no further obligation for coinsurance.

Some special provisions:

- Employers whose payroll costs are increased by more than 3 percent as a result of purchasing mandated coverage for employees would receive a cash (or tax credit) subsidy: 80 percent of the excess cost in the first year, continuing on a descending scale for four years following.
- Employers who failed to comply with the mandate would be liable for reimbursement to employees for expenses incurred by reason of the employer's noncompliance, and subject to a fine of up to two times what the employer would have spent in compliance.
- For the unemployed and the self-employed, the maximum premium would be 125 percent of the average per employee premium for all large group employees in the state.
- An assigned risk pool would be established in each state. All carriers in the state would participate, and would accept risk assigned to it.
- The federal government would be prohibited from interfering with the practice of medicine.
- Physician services would be reimbursable at "usual and customary, or reasonable

charges." Hospital services payments would be determined by a state agency, after consultation with providers, on a "reasonable cost basis" under acceptable methods of reimbursement including appropriate prospective rate determination systems. Other costs would be paid on a reasonable charge or a reasonable cost basis, as appropriate.

As with the earlier Medigap plan, the medical profession's new proposal would replace Medicaid.

* * * * *

Despite loud barks to the contrary from Democrats of both House and Senate leadership, the chances of passage of any type of national health insurance (NHI) measure this year seem remote. And the odds at this time seem to suggest that NHI may have trouble the following year. The thinking seems to be that such landmark legislation is more likely to come about in the 95th Congress due to the ever-growing restraints on the present economy.

Nonetheless, the House Ways and Means Committee's new subcommittee on Health has named an advisory panel on NHI. The list numbers more than 100 names—with more to come—and draws heavily from academia.

According to Subcommittee Chairman Dan Rostenkowski (D., Ill.), "the advice of these experts, who will be meeting with the Subcommittee during the coming months, should be of great assistance as we try to better understand our complex health care system and how NHI can improve it."

Present plans are to study updated legislative recommendations of interested groups through April 15 and then hold few, if any, public hearings on NHI before tackling the job of framing a bill. The Subcommittee will be meeting almost every afternoon.

The advisory group was said to "contain no members who are officials of national organizations or groups that have espoused specific approaches to NHI." The members "know something that the Subcommittee should learn about and were not chosen to represent organized interests," said Rostenkowski.

Several ex-federal health officers were named, including: Wilbur Cohen, former Health, Education and Welfare Secretary; Philip Lee, M.D., and Merlin Duval, M.D., former Assistant HEW Secretaries for Health; John Veneman, once HEW Undersecretary; former Social Security Commissioner Robert Ball and a former Social Security actuary, Robert Myers.

From universities come Roberta Fenlon, M.D., of the University of California Medical School; Robert Heyssel, M.D., Director of the Johns Hopkins Hospital; Howard Hiatt, M.D., Dean, Harvard School of Public Health; Edmund Pellegrino, M.D., Professor of Medicine at Yale University; Ernest Saward, M.D., Associate Dean, University of Rochester School of Medicine; Nathan Stark, University of Pittsburgh School of Medicine; Kerr White, M.D., Johns Hopkins; and William Schwartz, M.D., chairman, Department of Medicine, Tufts University.

Economists in the health field represented included I. S. Falk, Victor Fuchs, Rashi Fein and Herman Somers.

Individual practitioners with no affiliations listed were David Williams, M.D., Laurinburg, N. C.; Darwin Richardson, M.D., Needles, Calif; Robert Derbyshire, M.D., Santa Fe, N. M.; and Dan Billmeyer, M.D., Oregon City, Ore.

* * * * *

The present crisis in the underwriting of professional liability insurance has become a key issue in the new Congress. The Senate Health Subcommittee has slated hearings starting in April. The House Health Subcommittee is expected to follow suit. Five major bills tackling the problem already have been introduced.

However, a ticklish jurisdictional problem has cropped up, with no one sure yet what Congressional committee should have prime legislative responsibility. Technically, it would appear that the House and Senate Judiciary committees would have a strong claim because of the legal aspects of the problem. However, the Health subcommittees as well as House Ways and Means and Senate Finance also have an obvious stake.

Principal professional liability bills already introduced include:

- H. R. 1305, By Representative Marjorie Holt (R., Md.), to establish a Commission on Awards.
- H. R. 1378, By Chairman Dan Rostenkowski (D., Ill.) of the Ways and Means Health subcommittee, to provide for studies of the problem by the National Academy of Science's Institute of Medicine.
- S. 188, By Senator Gaylord Nelson (D., Wis.), to authorize HEW to set up a re-insurance program and to conduct studies and experiments.
- S. 482, By Senators Ted Kennedy and Daniel Inouye (D., Hawaii), for a no-fault plan eliminating contingency fees but subjecting physicians to strict supervision.
- S. 215, By the same Senators, to establish compulsory arbitration as an alternative to the above proposal.

The American Hospital Association has voted for the creation of a captive reinsurance company or comparable mechanism, to implement a national malpractice and general liability insurance program for hospitals and a "positive legislative program" to seek remedies. A one-time assessment of \$4 per hospital bed would help start the plan, which wouldn't be acted upon finally until a special meeting in May .

The AHA plan would provide first dollar coverage up to the limit of the policy purchased by the hospitals. It is expected that this policy would provide coverage for each and every malpractice occurrence of up to \$15 million.

All employees of the hospital including house staff would be covered. Physicians under contractual compensation relationships would be included — emergency room contract physicians, anesthesiologists, radiologists, pathologists, etc., for their professional activities within the hospital.

However, AHA said the insurers have advised that private practitioners cannot be included at this time in this program.

Rep. James Hastings (R., N. Y.), a member of the House Health Subcommittee, has announced that a national conference on medical mal-

practice insurance will take place in late March in Washington. The two-day conference was arranged by Hastings and the American Group Practice Association. Hastings said he believes the conference will be the first attempt "to examine the causes of the malpractice crisis and explore all alternatives so as to be able to develop a workable remedy which would protect both the doctor and his patient."

Among the scheduled speakers are Senator Edward Kennedy (D., Mass.), Chairman of the Senate Health Subcommittee, Chairman Paul Rogers (D., Fla.) of the House Health Subcommittee, and Roger Egeberg, M.D., Special Assistant to the Secretary (HEW) for Health Policy Affairs.

* * * * *

Ten patients and five physicians have joined the American Medical Association in legal action against new hospital utilization review regulations adopted by the Department of Health, Education and Welfare.

The action marks the first time the AMA has taken court action against the government. The suit, filed in Northern Illinois Federal District Court, seeks a preliminary injunction, on the grounds that the plaintiffs will be "irreparably injured" if the regulations are permitted to remain in force. Ultimately, a permanent injunction is requested.

The AMA and its co-plaintiffs contend that the utilization review regulations violate the constitutionally protected rights of patients to receive medical care in accordance with the best judgment of their doctors; violate the constitutionally protected rights of physicians to practice medicine; violate specific sections of the Medicare and Medicaid laws; exceed the authority granted to the Secretary of HEW; and were issued in a manner contrary to the procedures required by the Constitution and the Administrative Procedure Act.

The regulations became effective February 1 and hospitals were given until April 1 to file with state agencies their plans for implementing the regulations. They require that every decision by a physician to hospitalize a Medicare or Medicaid patient be evaluated by a "utilization

review committee" of the admitting hospital within one working day of the patient's admission.

The committee may have members who are not physicians and may act through agents who are not physicians.

"This is the issue we are putting before the courts and before the American people," stated AMA President Malcolm C. Todd, M.D. "Is the decision that you need hospital care to be made by your doctor — who knows you — or by a physician who does not know you — or worse yet, by a non-physician.

"The issue is that simple," Dr. Todd said.

* * * * *

Congress has signaled for flank-speed on anti-recession legislation to provide health insurance to the unemployed. Hearings have been already slated by the Health Subcommittee of the House Ways and Means Committee. The Senate Health Subcommittee will also conduct hearings.

Major bills have been introduced in both House and Senate to ease the problems of the growing number of the out-of-work by helping them obtain private health insurance in those cases where it has lapsed because of unemployment.

The American Medical Association has proposed such assistance and urged the lawmakers to approve it.

The AMA bill contains the following concepts:

- Employers who provide health insurance for employees would be required to continue coverage for 30 days after an employee's termination.
- An unemployed person's working spouse would immediately be eligible to enroll in a health insurance plan, even if the plan was not open to enrollment otherwise.
- Other unemployed persons eligible for unemployment compensation would be continued in the plan at their last place of employment with premiums paid by the federal government from general revenues.

Arkansas Doctors' Week

At the official ceremony held April 9, 1975, in the Governor's Conference Room, Governor David Pryor signed a State of Arkansas proclamation declaring the week of April 20-27, 1975, as "Arkansas Doctors' Week."

The proclamation read as follows:

"TO ALL TO WHOM THESE PRESENTS SHALL COME — GREETINGS:

WHEREAS, The Arkansas Medical Society, organized in 1875, has worked steadily for the improvement of the health of the citizens of Arkansas; and

WHEREAS, The Medical Society was largely responsible for the establishment of the medical school in 1879 and has since worked to improve its programs and offerings; and

WHEREAS, The Medical Society caused to be

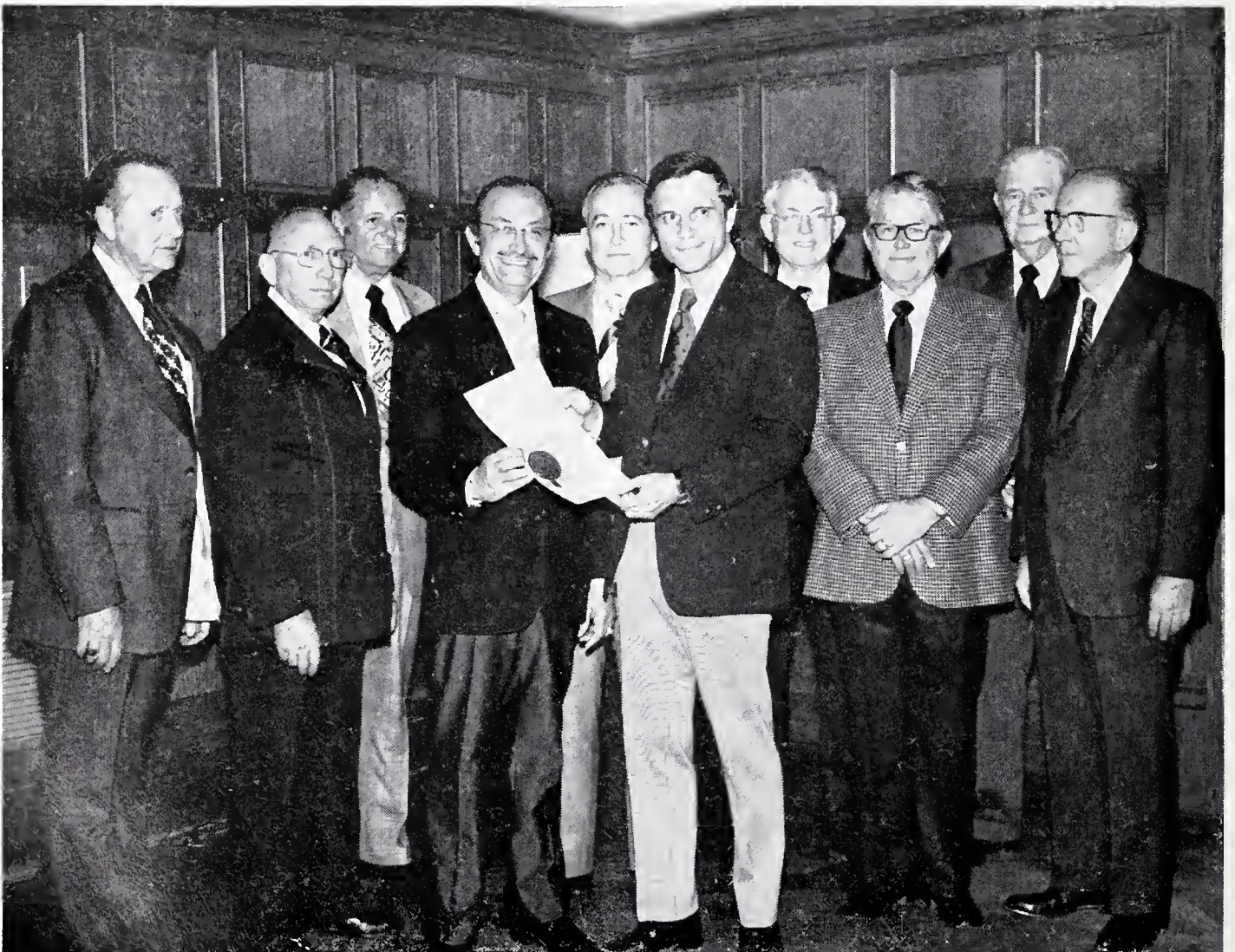
established the State Medical Board to guarantee that physicians practicing in the state are properly trained and ethical; and

WHEREAS, Organized medicine has been responsible for every single major advance in the health care of Arkansans, including tuberculosis control and cancer registry:

NOW, THEREFORE, I, David Pryor, Governor of Arkansas, do hereby proclaim the week of April 20-27, 1975 as

ARKANSAS DOCTORS' WEEK
in Arkansas.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Arkansas to be affixed at the Capitol in Little Rock on this 9th day of April in the year of our Lord, Nineteen Hundred Seventy Five."



The proclamation signing ceremony was attended by the Arkansas Medical Society members pictured above. From left, Chairman of the Council C. C. Long, M.D.; Past President H. W. Thomas, M.D.; Secretary H. Elvin Shuffield, M.D.; President Ben N. Saltzman, M.D.; President-elect T. E. Townsend, M.D.; Governor Pryor; and Past Presidents John Wood, M.D., Jack Kennedy, M.D., Robert Watson, M.D., and L. A. Whittaker, M.D.



PERSONAL AND NEWS ITEMS

Dr. Walt New Chief-of-Staff

Dr. James R. Walt of Little Rock has been elected chief-of-staff of the Doctors' Hospital, which opened May 1st in Little Rock. Dr. Philip T. Cullen of Little Rock will serve as chief-of-staff elect and Dr. A. T. Gillespie of Little Rock will be secretary of staff.

Dr. Adams Named Prison Medical Director

Dr. Carl Adams of Benton has been appointed Medical Director for the State Department of Corrections. Dr. Adams will live at the Cummins Prison Farm in Lincoln County and will be in charge of medical care for inmates at Cummins and the Tucker Intermediate Reformatory.

Physician Locates

Dr. William G. Bradley, formerly in practice in Memphis, Tennessee, has located his practice in Crossett. Dr. Bradley will be associated with Dr. F. N. Burt and Dr. D. L. Toon at the Family Clinic Building.

Dr. McPhail and Saudi Arabia Assassination

Dr. Jasper McPhail, formerly of Little Rock and now director of surgery at King Faisal Specialist Hospital in Saudi Arabia, is reported to have tried to keep King Faisal alive after he was shot recently. However, it was reported that the King was dead on arrival at the hospital, which is across the street from the King's palace, site of the assassination.

Dr. Bruce and Dr. Shorey Speak

Dr. Thomas Bruce and Dr. Winston Shorey of Little Rock and the School of Medicine, recently spoke to the citizens of Ashley County in Hamburg about rural medical services. The discussions centered on what is being done in Arkansas to encourage more family practice physicians to locate in smaller communities.

State Doctors' Articles Published

The March 1975 issue of Southern Medical Journal contained an article by Arkansas physicians. Drs. Charles M. Boyd, Bernard W. Thompson, Fernando Padilla, and W. H. Hall of Little Rock jointly authored an article entitled "Pro-

tein-Losing Enteropathy in Lymphoma of the Small Intestine."

Retired (Military) Officers Association

The Retired Officers Association is conducting a survey in Arkansas of retirees (military officers) and dependents to determine interest in participating in a health testing program. The program is concerned with preventive medicine. For details contact your nearest Retired Officers Association chapter or write: Donald C. Foster, Colonel USAF (Retired), Executive Vice President, Retired Officers Association, 1625 Eye Street, N.W., Washington, D.C. 20006. Phone 202-331-1111.



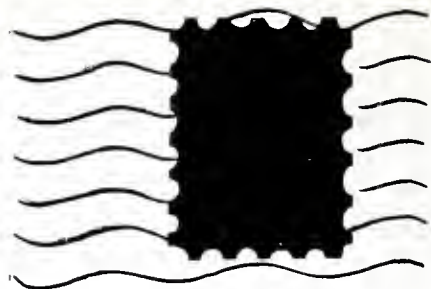
Woman's
Auxiliary

Sebastian County Auxiliary Donates Books

Over 100 books about health have been donated to the Fort Smith Public Library by the Sebastian County Medical Society Auxiliary. The donation is part of the Auxiliary's continuing project for health education. Mrs. Kemal Kutait is currently serving as president of the Woman's Auxiliary to the Sebastian County Medical Society.

Pulaski County Auxiliary Sponsors Benefit

The Pulaski County Medical Society Auxiliary recently sponsored a benefit "Pot Pourri Benefit Sale" in Little Rock. Money raised will be used for additions to a full nursing scholarship, scholarships for children at Aldersgate Medical Camp, and the Arkansas Medical Education and Research Fund.



LETTERS TO THE EDITOR

Dear Dr. Kahn:

I am happy to see the Arkansas Medical Society Journal continue to show an interest in ophthalmology and ophthalmic subjects. However, I would like to take exception to some of the conclusions in Dr. Roy's recent article on Phacoemulsification: An Improved Cataract Technique.

The title of the article, of course, indicates the phacoemulsification procedure is an improved way of cataract extraction. I think this conclusion remains to be proved and I think it is unfortunate that this title was chosen for the article. The article is, of course, well documented with references and reference No. 8, Dr. J. H. Little's monograph on the subject of phacoemulsification, is the source of the statement in the body of the summary that "these complications are fewer than in the standard cataract procedure." If one reviews Dr. Little's monograph on phacoemulsification there is no documentation of his statement that phacoemulsification complications are less than intracapsular complications. In Dr. Little's monograph he states in the comments section that he has done over 800 procedures with this technique and had only one lost eye, and dismisses any comparison with the statement that overall results are significantly better than those of the larger incision intracaps. I find it difficult to accept this as good solid scientific evidence of a comparison study between intracapsular and phacoemulsification procedures.

It would seem that this technique is still too new to totally evaluate the complication rate between these two types of cataract operations. It is hoped that further evidence will be forthcoming to indicate that there is, indeed, a difference in complication rate between these procedures. I would hope that until this conclusion is adequately documented that the phacoemulsi-

fication procedure will not be proposed as a replacement for the intracapsular procedure.

Sincerely,

Robert P. Hughes, Jr., M.D.



THINGS TO COME



Medical Aspects of Alcoholism

A seminar entitled "Medical Aspects of Alcoholism — In Search of Early Diagnosis and Treatment" will be held May 27-28, 1975, in Louisville, Kentucky. The seminar is sponsored primarily by the University of Louisville in conjunction with several other organizations. For details write Joe Trabue, Department of Health, Physical Education and Research, University of Louisville, Louisville, Kentucky 40208, telephone 502-636-4463.

Arkansas Trauma Seminar

The American College of Surgeons and the Arkansas Committee on Trauma are sponsoring a seminar on "Emergency Care of the Seriously Injured and Critically Ill Patient," June 27-28, 1975, in Jonesboro, Arkansas. Co-sponsors are the Arkansas Medical Society and the American College of Emergency Physicians. For details and registration information contact Samuel E. Landrum, M.D., F.A.C.S., Chairman, Arkansas Committee on Trauma, 522 South 16th Street, Fort Smith, Arkansas 72901.

Institute for Pediatric Radiology Program

The Institute for Pediatric Radiology and Dr. Charles E. Shopfner will present a program entitled "Radiology of the Pediatric Gastrointestinal Tract" August 2-3, 1975, at the Marriott Hotel in New Orleans, Louisiana. For additional information contact: Institute for Pediatric Radiology, 4148 North Cleveland Avenue, Kansas City, Missouri 64117.

Seventh Annual Arkansas-Oklahoma Cancer Forum

The Seventh Annual Arkansas-Oklahoma Cancer Forum will be held in Fort Smith, Arkansas, on September 25-26, 1975. Guest speakers will

be from Memorial Hospital and Sloan Kettering Institute, New York, New York. For registration details, write Mr. Wayne Quick, Executive Vice President, Arkansas Division, American Cancer Society, 1429 West 7th Street, Little Rock, Arkansas 72203. Phone 501-376-0554.

**Conference on Physicians,
Schools and Communities**

The Department of Health Education of the American Medical Association announces the Fifteenth National Conference on Physicians, Schools and Communities. The conference will be held November 20-21, 1975, at the Drake Hotel in Chicago.

Reach to Recovery Forum

The Arkansas Division, American Cancer Society, will sponsor a "Reach to Recovery Forum

for Rehabilitation of Mastectomies" June 2-3, 1975, in Little Rock, Arkansas. The training session for nurses and volunteers (and demonstrations of all available prostheses) will be held in the Southwestern Bell Telephone Company Auditorium at 1111 West Capitol in Little Rock.

An Open Forum for physicians, nurses, counselors, husbands of mastectomy patients, and interested public will be held June 5, 1975, at the Old West Dinner Theatre in Little Rock. A style show for mastectomies will be featured and all available prostheses will be on display. For more information contact Mr. Wayne Quick, Executive Vice President, Arkansas Division, American Cancer Society, 1429 West 7th Street, Little Rock, Arkansas 72203. Phone 501-376-0554.



O B I T U A R Y

Dr. Joseph Herman Sanderlin

Dr. Joe H. Sanderlin of Little Rock died March 16, 1975, at the age of eighty-two.

He attended the University of Arkansas School of Medicine and was graduated from Tulane University School of Medicine in 1921. Dr. Sanderlin was a member of the staff of Baptist Medical Center and St. Vincent Infirmary in Little Rock. He served as chief of staff at St. Vincent and chief of the Gynecology sections of both hospitals. He also served as Medical Director for First Pyramid Life Insurance Company of Little Rock for twenty-four years.

Dr. Sanderlin was a member of the Pulaski County Medical Society, Arkansas Medical Society, American Medical Association, American College of Surgeons, American College of Obstetrics and Gynecology, and the Southern Medical Association. He received the Distinguished Service Award from the University of Arkansas

School of Medicine for having served forty-four years on the voluntary faculty at the school. He was also presented a citation for his service and leadership at the School of Medicine by the Executive Council of the institution.

Dr. Sanderlin is survived by his wife, Burte.

Dr. Edwin Lee Dunaway

Dr. Edwin L. Dunaway of Conway died March 21, 1975, at the age of sixty-eight. He was a native of Bee Branch, in Van Buren County.

Dr. Dunaway was a 1938 graduate of the University of Arkansas School of Medicine. He had practiced medicine for thirty-five years in Conway. He was a veteran of World War II and achieved the rank of Major in the United States Army. Dr. Dunaway was a former State Racing Commissioner and was chosen president of the National Association of Racing Commissioners in 1965. He also served three terms on the Conway Board of Education. He was a member of the Faulkner County Medical Society, Arkansas Medical Society, and the American Medical Association. He was a staff member of the Conway Memorial Hospital.

Dr. Dunaway is survived by his wife, Eula, one daughter, two brothers, and one sister.

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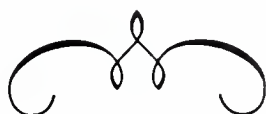
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ARKANSAS MEDICAL SOCIETY

MEMBERSHIP ROSTER

1974-1975



HEADQUARTERS OFFICE:

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FORT SMITH, ARKANSAS 72901
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FP	Grasse, A. Meryl.	P. O. Box 438, Calico Rock 72519.	297-3726
GS	Guenther, J. F.	126 W. 6th, Mountain Home 72653.	425-3131
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FP	Wilson, Jack C.	353 E. 8th, Mountain Home 72653.	425-3125
R	Wilson, M. Carolyn	353 E. 8th, Mountain Home 72653.	425-3125
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FP	Compton, Neil	P. O. Box 209, Bentonville 72712.	273-5413
R	Cooper, Edward M.	Concordia, Bella Vista 72712.	855-7154
PATH	Denman, David A.	Rogers Memorial Hospital, Rogers 72756.	636-1300
FP	Garrett, John L.	P. O. Box 369, Gravette 72736.	787-5291
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FP	Hitt, Jerry L.	P. O. Box 737, Rogers 72756.	636-2711
FP	Howard, W. H.	903 Northwest 9th, Bentonville 72712.	273-5551
FP	Hull, Robert R.	1301 W. Persimmon, Rogers 72756.	636-7004
FP	Huskins, James D.	304 S. Maxwell, Siloam Springs 72761.	524-3141
FP	Jackson, James L.	309 S. Main, Bentonville 72712.	273-2173
GS	Jennings, William E.	P. O. Box 737, Rogers 72756.	636-2711
R	Knapp, James R.	Rogers Memorial Hospital, Rogers 72756.	636-1300
IM	Miles, Richard W.	P. O. Box 737, Rogers 72756.	636-2711
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FP	Stinnett, Charles H.	304 S. Maxwell, Siloam Springs 72761.	524-3141
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FP	Weaver, Donald D.	P. O. Box 9, Gentry 72734.	736-2213
FP	Weaver, Robert H.	P. O. Box 9, Gentry 72734.	736-2213
FP	Webb, William F.	P. O. Box 368, Decatur 72722.	752-3233
FP	White, Harry M.	P. O. Box 737, Rogers 72756.	636-2711
IM	Wilson, Stewart M.	P. O. Box 737, Rogers 72756.	636-2711
BOONE COUNTY			
GS	Bell, Thomas E.	P. O. Box 1116, Harrison 72601.	365-6418
R	Bennett, Joe D.	651 N. Spring, Harrison 72601.	365-9667
OTO	Chambers, Carlton L., III	651 N. Spring, Harrison 72601.	365-7684
PD	Chambers, Elizabeth S.	651 N. Spring, Harrison 72601.	365-7684
FP	Daniel, Charles D.	P. O. Box E, Marshall 72650.	448-3327
U	Ferguson, Noel F.	651 N. Spring, Harrison 72601.	365-9481
FP	Fowler, Ross	217 W. Stephenson, Harrison 72601.	365-8651
GS	Gladden, Jean C.	P. O. Box 1118, Harrison 72601.	365-8275
FP	Guyer, G. L.	2007 McCracken Dr., Stuttgart 72160.	673-7211
FP	Hammon, Albert R.	651 N. Spring, Harrison 72601.	365-5461
PH	Hudson, William A.	P. O. Box 237, Jasper 72641.	446-2203
FP	Jackson, Ulys	118 S. Pine, Harrison 72601.	365-5333

Type of Practice	Member's Name	Address	Telephone Number
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PATH	Kreutzer, Donald W.	Boone County Hospital, Harrison 72601	365-6141
FP	Langston, Robert H.	520 N. Spring, Harrison 72601	365-8286
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OBG	Mahoney, Paul L., Jr.	651 N. Spring, Harrison 72601	365-7334
FP	Maris, Mahlon O.	P. O. Box 759, Harrison 72601	365-8247
FP	McCoy, O. B.	P. O. Box 578, Harrison 72601	365-3592
RD	Owens, D. L.	P. O. Box 875, Harrison 72601	365-3262
IM	Robinson, G. Allen	P. O. Box 728, Harrison 72601	365-2763
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OBG	Simpson, Thomas J.	651 N. Spring, Harrison 72601	365-2441
IM	Smith, Van	P. O. Box 1077, Harrison 72601	365-3459
R	Thomas, Leo D.	651 N. Spring, Harrison 72601	365-9667
OR	Vowell, Don R.	120 E. Bower, Harrison 72601	365-8289
FP	Wallace, Oliver	210 Phillips Avenue, Green Forest 72638	438-5218
GS	Williams, Rhys A.	P. O. Box 1118, Harrison 72601	365-8275
FP	Wilson, Joe Bill	520 N. Spring, Harrison 72601	365-8286

BRADLEY COUNTY

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FP	Marsh, James W.	302 N. Main, Warren 71671	226-2112
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FP	Whaley, W. C.	205 E. Church, Warren 71671	226-5811
FP	Wynne, George F.	113 W. Cypress, Warren 71671	226-2844

CHICOT COUNTY

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FP	Smiley, George W.	Lake Village Clinic, Lake Village 71653	265-5343
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FP	Talbot, Allen G.	Lake Village Clinic, Lake Village 71653	265-5343
FP	Thomas, H. W.	105 N. Freeman, Dermott 71638	538-5255
FP	Weaver, William J.	P. O. Box Q, Eudora 71640	355-4376
FP	Wilson, Thomas C.	115 E. Peddicord, Dermott 71638	538-5253

CLARK COUNTY

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FP	Balay, John W.	416 Main, Arkadelphia 71923	246-2431
GS	Blackmon, James T.	1008 Pine, Arkadelphia 71923	246-6734
RD	Clark, Charles G.	1108 Huddleston, Arkadelphia 71923 (Res.)	246-4493
FP	Gary, Eli	137 N. 6th, Arkadelphia 71923	246-2491
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FP	Mann, R. Jerry	416 Main, Arkadelphia 71923	246-2431
FP	Nunnally, R. H.	107 N. 3rd, Gurdon 71743	353-2501
NP	Parsons, Earl	117 N. 11th, Arkadelphia 71923	246-8364
FP	Peeples, George R.	305 E. Main, Gurdon 71743	353-4422
R	Speer, Marolyn N.	Clark County Hospital, Arkadelphia 71923	246-2441
R	Stevens, David G.	1912 Walnut, Arkadelphia 71923	246-7598
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PD	Toombs, Vernon L.	P. O. Box 70, Arkadelphia 71923	246-5851

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FP	Barnett, Michael E.	4th and Spring, Heber Springs 72543	362-3143
FP	Hinkle, Richard A.	P. O. Box 128, Quitman 72131	589-2600
FP	McClanahan, D. H.	401 W. Searcy, Heber Springs 72543	362-2414
FP	Poff, Nathan L.	401 W. Searcy, Heber Springs 72543	362-2414
R	Scruggs, Joe B.	Cleburne County Hospital, Heber Springs 72543	362-3121
IM	Sharp, Jack V.	Highway 110 W., Box 70, Heber Springs 72543	362-3316
FP	Smith, W. Wayne	109 W. Main, Heber Springs 72543	362-2451
FP	Wells, W. M.	4th and Spring, Heber Springs 72543	362-3143

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FP	Jones, T. H.	P. O. Box 387, Waldo 71770	693-5634
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FP	White, Henry B.	P. O. Box 230, Morrilton 72110	354-4623

CRAIGHEAD-POINSETT COUNTY

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RD	Barnett, H. C.	1301 Terrace Court, Jonesboro 72401 (Res.)	932-7795
RD	Bell, William K.	517 W. Jefferson, Jonesboro 72401 (Res.)	932-9113
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OPH	Blanton, M. E.	808 S. Church, Jonesboro 72401	932-8433
U	Bogaev, Leonard R.	812 Cobb, Jonesboro 72401	932-2926

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OTO	Eddington, William R.	505 E. Matthews, Jonesboro 72401	935-8132
OR	Edwards, Harvey O.	924 S. Main, Jonesboro 72401	935-9123
GS	Faris, John C.	907 Union, Jonesboro 72401	935-8470
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R	Garner, William L.	224 E. Matthews, Jonesboro 72401	932-7458
NP	Guthrie, Alastair	P. O. Box 1613, Jonesboro 72401	932-0692
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GS	Keisker, H. W.	505 E. Matthews, Jonesboro 72401	932-4581
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OPH	McKee, B. E.	505 E. Matthews, Jonesboro 72401	935-6396
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OR	Shanlever, W. T.	924 S. Main, Jonesboro 72401	935-9123
IM	Shepherd, W. F.	505 E. Matthews, Jonesboro 72401	932-8121
P+	Smith, Bob W.	4313 W. Markham, Little Rock 72205	666-0181
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FP	Smith, Vestal B.	P. O. Box 614, Marked Tree 72365	358-2811
R	Smoot, John D.	P. O. Box 934, Jonesboro 72401	932-9022
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IM	Starnes, C. W.	University Center, Jonesboro 72401	932-0150
OBG	St. Clair, John T., Jr.	505 E. Matthews, Jonesboro 72401	935-3990
GS	Stroud, Paul T.	P. O. Box 818, Jonesboro 72401	932-8323
FP	Swingle, Charles G.	105 Nathan, Marked Tree 72365	358-2036
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OPH	Utley, Phillip M.	920 S. Main, Jonesboro 72401	932-8221
FP	Verser, Joe	P. O. Box 106, Harrisburg 72432	578-2677
PATH	Vollman, Don B.	411 E. Matthews, Jonesboro 72401	932-7430
OPH	Webb, James W.	920 S. Main, Jonesboro 72401	932-8221
EM	Whittington, J. J., III	224 E. Matthews, Jonesboro 72401	972-4265
U	Williams, E. Walden	812 Cobb, Jonesboro 72401	932-2926
GS	Wilson, F. M.	505 E. Matthews, Jonesboro 72401	932-1987
PATH	Wilson, Joe T., Jr.	411 E. Matthews, Jonesboro 72401	932-7430
FP	Wisdom, Durwood	505 E. Matthews, Jonesboro 72401	932-8121
FP	Wisdom, Randall T.	505 E. Matthews, Jonesboro 72401	932-8121

CRAWFORD COUNTY

FP	Darden, L. R.	P. O. Box 623, Van Buren 72956	474-3224
FP	Edds, Millard C.	1103 Chestnut, Van Buren 72956	474-2361
FP	Hopkins, Ed G.	1103 Chestnut, Van Buren 72956	474-2361
	*Savery, Harry W.	Van Buren	
FP	Shearer, F. E.	P. O. Box 458, Alma 72921	632-3555

CRITTENDEN COUNTY

FP	Deneke, Milton D.	P. O. Box 607, West Memphis 72301	735-1170
OBG	Ferguson, T. Murray	200 S. Rhodes, West Memphis 72301	735-2150
OBG	Ford, Robert C., Jr.	200 S. Rhodes, West Memphis 72301	735-2150
FP	Hamilton, Ralph B.	300 S. Rhodes, West Memphis 72301	735-1170
GS	Jay, Gilbert D., III	200 S. Rhodes, West Memphis 72301	735-4612
OPH	Kennedy, Keith B.	P. O. Box 489, West Memphis 72301	735-7680
GS	Lanford, H. G.	308 S. Rhodes, West Memphis 72301	735-3664
FP	Lubin, Milton	200 S. Rhodes, West Memphis 72301	735-3919
IM	Peeples, C. W.	302 S. Rhodes, West Memphis 72301	735-1973
GS	Schoettle, G. P.	308 S. Rhodes, West Memphis 72301	735-3664
FP	Shrader, Floyd R.	200 S. Rhodes, West Memphis 72301	735-3919
FP	Smith, Bedford W.	300 S. Rhodes, West Memphis 72301	735-1170
IM	Taylor, C. H.	302 S. Rhodes, West Memphis 72301	735-1973
R	Utley, L. Thomas	200 Tyler, West Memphis 72301	735-1500
FP	Winters, W. Lee	11 E. Holiday Plaza, West Memphis 72301	735-8751
FP	Wright, William J.	1605 Second Street, Earle 72331	735-4400

CROSS COUNTY

FP	Beaton, K. E.	P. O. Box 158, Wynne 72396	238-2321
GS	Bethell, Robert D.	P. O. Box 158, Wynne 72396	238-2322
FP	Burks, Willard G.	P. O. Box 158, Wynne 72396	238-2321
FP	Crain, Vance J.	P. O. Box 158, Wynne 72396	238-2321
FP	Hayes, Robert A.	P. O. Box E, Wynne 72396	238-3261
FP	Jacobs, James R.	P. O. Box E, Wynne 72396	238-3261
FP	Young, J. Hosea	P. O. Box E, Wynne 72396	238-3261

DALLAS COUNTY

IM	Adams, Carl H.	State Hospital 72158	778-1111
FP	Atkinson, H. H.	P. O. Box 519, Fordyce 71742	352-2537
FP	Delamore, John H.	1101 W. 3rd, Fordyce 71742	352-7117
FP	Dobson, Jack T.	110 N. Clifton, Fordyce 71742	352-3151
FP	Estes, E. E.	P. O. Box 747, Fordyce 71742	352-2626
FP	Howard, Don Gene	110 N. Clifton, Fordyce 71742	352-3151
FP	Nutt, Hugh A.	110 N. Clifton, Fordyce 71742	352-3151
FP	Taylor, George D.	Sparkman Clinic, Sparkman 71763	678-2406

Type of Practice	Member's Name	Address	Telephone Number
DESHA COUNTY			
FP	Harris, Howard R.	207 S. Elm, Dumas 71639	382-4425
FP	Hoagland, Robert A.	145 W. Waterman, Dumas 71639	382-4878
FP	Moss, Swan B.	102 N. 4th, McGehee 71654	222-3141
FP	Robinson, Guy U.	207 S. Elm, Dumas 71639	382-4425
FP	Turney, Lonnie R.	101 S. 3rd, McGehee 71654	222-4044
DREW COUNTY			
FP	Binns, Van C.	201 E. Trotter, Monticello 71655	367-3531
FP	Busby, Arlee K.	816 N. Hyatt, Monticello 71655	367-3246
FP	Crane, Henry A., Jr.	P. O. Box 11, Fountain Hill 71642	853-5352
FP	Hicks, Charles E.	216 S. Main, Monticello 71655	367-5251
FP	Holder, James B.	300 E. Roosevelt, Little Rock 72206	372-8361
FP	Hyatt, C. Lewis	515 N. Main, Monticello 71655	367-5393
FP	Price, J. P., Jr.	216 S. Main, Monticello 71655	367-5251
FP	Wallick, Paul A.	P. O. Box 660, Monticello 71655	367-6867
FAULKNER COUNTY			
FP	Archer, Charles A., Jr.	1419 Caldwell, Conway 72032	329-3803
RD	Banister, Benjamin F., Jr.	923 Parkway, Conway 72032	NF
FP	Banister, Bob G.	923 Parkway, Conway 72032	329-3824
FP	Beasley, T. O.	919 Locust, Conway 72032	329-2946
ADM	Benafield, Robert B.	P. O. Box 2181, Little Rock 72203	378-2164
FP	Daniel, Sam V.	574 Locust, Conway 72032	329-6111
FP	Davidson, Dennis O.	1422 Caldwell, Conway 72032	327-1366
FP	Doss, John R.	919 Locust, Conway 72032	329-2946
RD	Downs, J. H.	P. O. Box 56, Nashville 71852 (Res.)	845-2265
R	Garrison, James S.	Conway Memorial Hospital, Conway 72032	329-3831
FP	Gordy, Fred, Jr.	552 Locust, Conway 72032	329-6881
OPH	Magie, J. J.	P. O. Box 1284, Conway 72032	327-4444
GS	Poindexter, Douglas A.	919 Locust, Conway 72032	327-0262
FP	Robinson, Thomas F.	923 Parkway, Conway 72032	329-3824
FP	Sanchez-Humala, Juan	New Port Richey, Florida	
FP	Smith, John D.	923 Parkway, Conway 72032	327-2957
FP	Taylor, Robert L.	810 Parkway, Conway 72032	329-3815
FRANKLIN COUNTY			
FP	Calaway, Robert L.	Drawer C, Mulberry 72947	997-3941
FP	Ewing, Rebecca F.	604 W. Commercial, Ozark 72949	667-2146
FP	Gibbons, David L.	504 W. Commercial, Ozark 72949	667-2285
ADM	Long, C. C.	216 N. 12th, Fort Smith 72901	785-2471
FP	Roberts, William J.	321 Logan, Charleston 72933	965-2672
GARLAND COUNTY			
IM	Adams, Frank M.	236 Central, Hot Springs 71901	623-8751
IM	Arnold, W. O.	1315 Central, Hot Springs 71901	624-1397
OTO	Atkinson, Robert H.	303 Central Tower Building, Hot Springs 71901	623-6101
RD	Black, Thomas N.	133 Oakwood, Hot Springs 71901 (Res.)	623-2156
R	Bohnen, Loren O.	901 W. Grand, Hot Springs 71901	623-6694
OTO	Borg, Robert V.	4409 Central, Hot Springs 71901	624-5422
OPH	Bracken, Ronald J.	505 W. Grand, Hot Springs 71901	624-4478
GS	Brunner, John H.	101 Whittington, Hot Springs 71901	624-5411
U	Burrow, Thomas E.	903 W. Grand, Hot Springs 71901	623-8110
GS	Burton, Frank M.	101 Whittington, Hot Springs 71901	624-5411
GS	Chamberlain, Joe W.	330 6th Street, Hot Springs 71901	623-4477
GS	Chamberlain, Warren W.	330 6th Street, Hot Springs 71901	623-4477
IM	Clardy, E. K.	P. O. Box 850, Hot Springs 71901	624-1281
U	Coffey, George C.	405 Central Tower Building, Hot Springs 71901	623-2731
RD	Daniel, R. L.	703 Higdon, Hot Springs 71901 (Res.)	623-9753
IM	Dembinski, T. Henry	804 1/2 Central, Hot Springs 71901	623-9781
OPH	Dodson, John W., Jr.	505 W. Grand, Hot Springs 71901	623-4541
OR	Durham, Thomas M.	505 W. Grand, Hot Springs 71901	623-7717
GS	Eisele, W. Martin	101 Whittington, Hot Springs 71901	624-5411
IM	Fotioo, George J.	505 Central Tower Building, Hot Springs 71901	623-5121
GS	French, James H.	101 Whittington, Hot Springs 71901	624-5411
FP	Frye, Ivan L.	P. O. Box 1358, Hot Springs 71901	624-4411
GS	Garner, Onyx P.	1705 Central, Hot Springs 71901	623-3521
	*Garratt, C. E.	Hot Springs	
RD	Goetze, Dorothy	104 Curve St., Hot Springs 71901 (Res.)	623-4913
NP	Goodin, Lyn A.	211 Hobson, Hot Springs 71901	623-6260
NP	Goodin, Walker D.	211 Hobson, Hot Springs 71901	623-6260
OTO	Goodrum, William A.	801 Central Tower Building, Hot Springs 71901	623-7031
IM	Graham, Richard F.	505 W. Grand, Hot Springs 71901	623-4391
NS	Gupta, Surinder N.	606 Central Tower Building, Hot Springs 71901	624-2554
OBG	Haggard, John L.	101 Whittington, Hot Springs 71901	624-5411
OTO	Harper, Edwin L.	4409 Central, Hot Springs 71901	624-5422
ADM	Hebert, Gaston A.	P. O. Box 1358, Hot Springs 71901	624-4411
GS	Hill, Robert L.	905 W. Grand, Hot Springs 71901	623-9581
IM	Hoyt, Jerry L.	328 Quapaw, Hot Springs 71901	624-4581
D	Irwin, William G.	99 Little Pine, Doctors Park, Hot Springs 71901	624-0673
GYN	Jackson, Haynes G.	238 Woodbine, Hot Springs 71901	623-6628
OPH	Johnston, Gaither C.	99 Little Pine, Doctors Park, Hot Springs 71901	624-7106
FP	Keadle, William R.	408 #8 Highway, Glenwood 71943	356-3155
FP	Kennedy, Jack W.	Desota Center, Hot Springs Village, Hot Springs 71901	984-6374
IM	King, Leeman H.	236 Central, Hot Springs 71901	623-1545
ANES	Klugh, Walter G., Jr.	505 W. Grand, Hot Springs 71901	623-9216
RD	Klugh, Walter G., Sr.	230 Pecan Street, Hot Springs 71901 (Res.)	623-2540
PATH	Knight, Patrick L.	501 Central Tower Building, Hot Springs 71901	623-2518
PATH	Lee, W. R.	Central Tower Building, Hot Springs 71901	623-2518
FP	Lovell, Clarence R.	414 Albert Pike, Hot Springs 71901	624-1211
FP	Mashburn, William R.	99 Little Pine, Doctors Park, Hot Springs 71901	623-4453
GS	Meek, Gary N.	905 W. Grand, Hot Springs 71901	623-1649
U	Millwee, Robert H.	903 W. Grand, Hot Springs 71901	623-0082
OR	Murray, DuBose	505 W. Grand, Hot Springs 71901	623-7717
OR	McConkie, Stuart B.	715 W. Grand, Hot Springs 71901	623-5300
GYN	McCrary, Robert F.	505 W. Grand, Hot Springs 71901	624-5477
PD	McFarland, Louis R.	211 Hobson, Hot Springs 71901	623-5752
FP	McMahan, J. C.	306 Albert Pike, Hot Springs 71901	624-2111
PD	Newton, Doane M.	236 Woodbine, Hot Springs 71901	624-2546
OBG	Pappas, Deno P.	101 Whittington, Hot Springs 71901	624-5411
FP	Parkerson, Carl R.	1421 Central, Hot Springs 71901	624-3341

Type of Practice	Member's Name	Address	Telephone Number
FP	Parkerson, Cecil W.	1421 Central, Hot Springs 71901	624-3341
IM	Patterson, Ralph M.	231 Central, Hot Springs 71901	624-5567
ANES	Peeples, Raymond E.	505 W. Grand, Hot Springs 71901	623-9216
FP	Power, Allyn R.	236 Central, Hot Springs 71901	623-3102
FP	Queen, George P.	125 Greenwood, Hot Springs 71901	623-3373
OBG	Rainwater, W. Sloan	101 Whittington, Hot Springs 71901	624-5451
FP	Reed, Lon E.	1315 Central, Hot Springs 71901	624-1207
PD	Rosenzweig, Joseph L.	236 Woodbine, Hot Springs 71901	624-2546
IM	Rowland, Ely Driver	110 Hawthorne, Hot Springs 71901	623-5581
GS	Sammons, Vernon E., Jr.	905 W. Grand, Hot Springs 71901	623-9581
FP	Sanders, Hallman E.	P. O. Box 1358, Hot Springs 71901	624-4411
IM	Sanders, Lawrence T.	101 Whittington, Hot Springs 71901	624-5411
RD	Scully, Francis J.	16 Conway Road, Hot Springs 71901 (Res.)	623-3726
	Smith, Oliver A.	Houston, Texas	
IM	Smith, William K.	1401 Medical Arts Building, Hot Springs 71901	623-2171
R	Springer, M. R., Jr.	901 W. Grand, Hot Springs 71901	623-6693
R	Springer, William Y.	901 W. Grand, Hot Springs 71901	623-6694
CR	Stough, D. B.	601 Central Tower Building, Hot Springs 71901	623-6921
D	Stough, D. B., III	99 Little Pine, Doctors Park, Hot Springs 71901	624-0673
OPH	Thomas, Wallace A.	P. O. Drawer D, Hot Springs 71901	624-1204
OBG	Thompson, Thomas P., Jr.	101 Whittington, Hot Springs 71901	624-5411
PD	Trieschmann, John W.	236 Woodbine, Hot Springs 71901	624-2546
U	Wade, H. King, Jr.	231 Central, Hot Springs 71901	624-5641
GS	Wright, Jack	211 Hobson, Hot Springs 71901	623-6677
P	Yohe, Charles D.	1402 Medical Arts Building, Hot Springs 71901	623-2517

GRANT COUNTY

FP	Clark, Curtis B.	200 S. Rose, Sheridan 72150	942-3155
FP	Irvin, Jack M.	205 W. High, Sheridan 72150	942-3171
RD	Kelly, Miles F.	P. O. Box 247, Sheridan 72150	942-4152
FP	Paulk, Clyde D.	200 S. Rose, Sheridan 72150	942-3155

GREENE-CLAY COUNTY

R	Baker, A. J.	P. O. Box 339, Paragould 72450	236-7733
FP	Baker, Clark M.	115 W. Court, Paragould 72450	236-6356
FP	Bradsher, Omer E.	901 W. Kingshighway, Paragould 72450	236-8765
FP	Collier, George, Jr.	130 S. 14th, Paragould 72450	236-6946
FP	Collier, Jon D.	P. O. Box 247, Rector 72461	595-3061
FP	Crow, Asa A.	320 S. 10th, Paragould 72450	236-3508
GS	Duckworth, Gordon L.	425 W. Jackson, Piggott 72454	598-2237
FP	Duckworth, Hillard R.	425 W. Jackson, Piggott 72454	598-2237
	*Finch, Robert M.	Paragould	
FP	Futrell, J. B.	Rector 72461	595-3332
FP	Harper, Bland R.	P. O. Box C, Monette 72447	486-2131
OR	Hazzard, Marion P.	912 W. Vine, Paragould 72450	236-6996
GS	Lawson, J. Larry	P. O. Box 6, Paragould 72450	239-9631
ANES	Martin, Richard O.	Community Methodist Hospital, Paragould 72450	236-7733
FP	Muse, Jerry L.	425 W. Jackson, Piggott 72454	598-2237
P	McGaughey, Solon	901 W. Kingshighway, Paragould 72450	236-8765
FP	McKelvey, Earle D.	409 S. 5th, Paragould 72450	236-8716
FP	Page, Bill C.	602 W. 2nd, Corning 72422	857-3541
R	Purcell, Donald I.	Community Methodist Hospital, Paragould 72450	239-8431
PATH	Richmond, Jack G.	P. O. Box 339, Paragould 72450	236-7733
FP	Shedd, Leonus L.	901 W. Kingshighway, Paragould 72450	236-8765
FP	Watson, Sam D.	411 S. 7th, Paragould 72450	236-8591
FP	Williams, Jacob M.	1001 W. Kingshighway, Paragould 72450	236-7623

HEMPSTEAD COUNTY

FP	Branch, James W.	426 S. Main, Hope 71801	777-4636
FP	Harris, C. Lynn	P. O. Box 550, Hope 71801	777-2131
FP	Harris, Lowell O.	P. O. Box 550, Hope 71801	777-2131
FP	Holt, Forney G.	202 S. Pine, Hope 71801	777-6722
GS	Martindale, James G.	116 S. Main, Hope 71801	777-3464
GS	Martindale, Jud B.	116 S. Main, Hope 71801	777-3464
FP	McKenzie, Jim	P. O. Box 10, Hope 71801	777-2321
FP	Wright, George H.	202 S. Pine, Hope 71801	777-6722

HOT SPRING COUNTY

FP	Brashears, Larry B.	1234 S. Main, Malvern 72104	332-5245
FP	Cobb, Russell W.	1420 Potts, Malvern 72104	332-3112
FP	Cole, John W.	725 E. Page Avenue, Malvern 72104	332-1569
ANES	Ellis, C. Randolph	1004 S. Main, Malvern 72104	332-6941
FP	Kersh, N. B.	1518 McBee, Malvern 72104	337-7533
FP	McCray, R. V.	214 E. Highland, Malvern 72104	332-2704
FP	Peters, Claude F.	1420 Potts, Malvern 72104	332-2521
FP	Vaughan, John A.	115 E. Highland, Malvern 72104	332-2371
FP	White, Robert H.	1004 Dyer, Malvern 72104	332-3664
FP	Wise, John D.	1219 S. Main, Malvern 72104	332-6961

HOWARD-PIKE COUNTY

FP	Dildy, Edwin V.	122 W. Hempstead, Nashville 71852	845-1933
RD	Holt, Horace H.	Route 1, Box 211, Nashville 71852	845-2406
FP	Jones, William J.	P. O. Box 49, Glenwood 71943	356-3921
FP	Smith, U. Lee	P. O. Box 807, Nashville 71852	845-3880
FP	Sykes, Robert R.	122 W. Hempstead, Nashville 71852	845-1933
FP	Turbeville, James O.	1124 N. Washington, Murfreesboro 71958	285-3341
FP	Ward, Hiram T.	510 N. Washington, Murfreesboro 71958	285-2491
R	Webb, Kathleen E.	2701 Pine, Texarkana 75501	792-9353
FP	Wesson, John H.	120 W. Sybert, Nashville 71852	845-4676
FP	Wilmoth, Marion H.	P. O. Box 804, Nashville 71852	845-4780

INDEPENDENCE COUNTY

FP	Beck, Carl T.	P. O. Drawer J, Mountain View 72560	269-3834
FP	Calaway, W. H.	181 S. Broad, Batesville 72501	793-5251
FP	Gray, Paul	P. O. Box 82, Batesville 72501	793-2321
FP	Hathcock, Alfred H.	377½ E. Main, Batesville 72501	793-5767
OPH	Jones, Edward T.	180 N. 5th, Batesville 72501	793-5257
GS	Ketz, Wesley J.	377 E. Main, Batesville 72501	793-2371
FP	Lytle, Jim E.	181 S. Broad, Batesville 72501	793-5251
GS	Monroe, Howard U.	Mountain View 72560	269-3236

Type of Practice	Member's Name	Address	Telephone Number
FP.	Moody, Lackey G.	377 E. Main, Batesville 72501	793-2371
FP.	Raney, Troy	303 N. Main, Cave City 72521	283-5762
FP.	Slaughter, Bob L.	P. O. Box 2416, Batesville 72501	793-2540
FP.	Smith, Bob G.	181 S. Broad, Batesville 72501	793-5251
	Stalker, James M.	Tulsa, Oklahoma	
FP.	Tatum, Harold M.	P. O. Box 147, Melbourne 72556	368-4344
FP.	Taylor, Chaney W.	181 S. Broad St., Batesville 72501	793-5251
FP.	Taylor, Charles A.	181 S. Broad St., Batesville 72501	793-5251
FP.	Walker, A. T.	P. O. Box 135, Thayer, Missouri 65791	417-264-7121
OBG	Wyatt, F. Q.	181 S. Broad, Batesville 72501	793-5251
R.	Young, Jack S., III	609 Second St., Newport 72112	523-6777

JACKSON COUNTY

IM.	Ashley, John D.	2nd and Laurel, Newport 72112	523-6721
GS.	Carney, J. W.	1205 McLain, Newport 72112	523-8911
IM.	Dudley, Guilford M.	1205 McLain, Newport 72112	523-8911
GS.	Frankum, Jerry M., Jr.	2nd and Laurel, Newport 72112	523-6721
FP.	Green, Roger L.	2nd and Laurel, Newport 72112	523-6721
GS.	Harris, Haymond	1205 McLain, Newport 72112	523-8911
RD.	Jackson, Jabez F.	304 Ash Street, Newport 72112 (Res.)	523-8314
OBG	Jackson, Jabez F., Jr.	1205 McLain, Newport 72112	523-8911
RD.	Norris, R. O.	P. O. Box 626, Tuckerman 72473	349-5527
OPH	Stanfield, Wayne	1513 Malcolm, Newport 72112	523-3321
GS.	Williams, Thomas E.	2nd and Laurel, Newport 72112	523-6721
FP.	Wright, John C.	1205 McLain, Newport 72112	523-8911

JEFFERSON COUNTY

R.	Anderson, Charles W.	P. O. Box 7863, Pine Bluff 71601	534-8651
FP.	Atnip, Gwyn	1111 West 15th, Pine Bluff 71601	535-3551
FP.	Bell, Carl H., Jr.	1602 W. 42nd, Pine Bluff 71601	535-4850
OR.	Blackwell, Banks	1400 W. 43rd, Pine Bluff 71601	534-3122
OBG	Bracy, Calvin M.	1704 W. 42nd, Pine Bluff 71601	536-7550
U.	Brooks, R. T., Jr.	1421 Cherry, Pine Bluff 71601	535-2200
PD.	Bruce, Lloyene	1606 W. 42nd, Pine Bluff 71601	534-2232
FP.	Bryant, R. Frank	1112 Linden, Pine Bluff 71601	534-4352
OTO.	Buckley, John W.	1612 W. 42nd, Pine Bluff 71601	535-5719
P.	Burford, Thomas G.	Benton Unit, State Hospital 72158	778-1111
PATH.	Clark, James F., Jr.	1515 W. 42nd, Pine Bluff 71601	535-6800
OBG	Coker, S. Dale	1720 Doctors Drive, Pine Bluff 71601	536-4986
IM.	Crenshaw, John	1421 Cherry, Pine Bluff 71601	535-2200
CS.	Crow, R. Lewis	1724 Doctors Drive, Pine Bluff 71601	536-5861
FP.	Cunningham, T. J.	300 W. 6th, Pine Bluff 71601	534-4723
D.	Davis, Charles M.	1708 W. 42nd, Pine Bluff 71601	535-7477
P.	Dean, Lee A.	2500 Rike Dr., Pine Bluff 71601	534-1834
GS.	Dickins, Robert D.	1003 Cherry, Pine Bluff 71601	534-8141
R.	Fendley, Claude E.	1515 W. 42nd, Pine Bluff 71601	534-8651
OPH.	Glasscock, Robert E.	1706 Doctors Drive, Pine Bluff 71601	534-4357
PD.	Green, Horace L.	1420 W. 43rd, Pine Bluff 71601	534-6210
PD.	Hart, J. Clyde, Jr.	1420 W. 43rd, Pine Bluff 71601	534-6210
OBG	Hayden, Virgil L.	1706 W. 42nd, Pine Bluff 71601	535-8181
PD.	Henderson, Francis M.	1515 W. 42nd, Pine Bluff 71601	535-2890
IM.	Hoover, S. H.	1421 Cherry, Pine Bluff 71601	535-2200
OPH.	Hughes, L. Milton	1702 W. 42nd, Pine Bluff 71601	536-7738
U.	Hutchison, Ernest L.	1724 W. 42nd, Pine Bluff 71601	535-1562
OBG	Hyman, Carl E.	121 E. 4th, Pine Bluff 71601	534-3365
GS.	Irwin, Raymond A., Jr.	1421 Cherry, Pine Bluff 71601	535-2200
P.	James, William Joe	2500 Rike Dr., Pine Bluff 71601	534-1834
CD.	Jenkins, B. J.	1515 W. 42nd, Pine Bluff 71601	536-3015
ANES.	Jenkins, Mary Ellen	1410 W. 42nd, Pine Bluff 71601	535-5522
R.	Joseph, Aubrey S.	P. O. Box 7863, Pine Bluff 71601	534-8651
OPH.	King, Yum Y.	1008 W. 11th, Pine Bluff 71601	536-1897
OTO.	Langston, Lloyd G.	1612 W. 42nd, Pine Bluff 71601	535-5719
FP.	Maynard, Ross E.	303 National Building, Pine Bluff 71601	534-5732
GS.	Meredith, W. R.	1716 W. 42nd, Pine Bluff 71601	535-8727
IM.	Miller, Donald L.	1515 W. 42nd, Pine Bluff 71601	535-6800
R.	Milligan, Monte C.	P. O. Box 7863, Pine Bluff 71601	534-8651
IM.	Monroe, Sanford C.	1421 Cherry, Pine Bluff 71601	535-2200
FP.	Morris, Harold J.	1030 Poplar, Pine Bluff 71601	534-0822
R.	McDonald, Robert L.	P. O. Box 7863, Pine Bluff 71601	534-8651
OPH.	Nixon, William R.	709 W. 6th, Pine Bluff 71601	534-2624
IM.	Nuckolls, John W.	1421 Cherry, Pine Bluff 71601	535-2200
RD.	Payne, Virgil L.	802 W. 5th, Pine Bluff 71601 (Res.)	534-5618
FP.	Perry, V. Bryan	1722 W. 42nd, Pine Bluff 71601	535-4141
OBG	Pierce, J. R., Jr.	1712 W. 42nd, Pine Bluff 71601	535-3443
FP.	Raney, Oliver C.	1720 W. 42nd, Pine Bluff 71601	534-5861
OR.	Reed, E. Frank	916 Cherry, Pine Bluff 71601	535-0121
FP.	Reed, Ulysses S.	1111 1/2 East 4th, Pine Bluff 71601	534-6910
PD.	Rhyne, James T.	1420 W. 43rd, Pine Bluff 71601	534-6210
GS.	Rittelmeyer, C. M.	1716 W. 42nd, Pine Bluff 71601	535-8727
GS.	Roberson, George V.	1708 Doctors Drive, Pine Bluff 71601	535-2716
FP.	Robinette, Joseph S.	1722 Doctors Drive, Pine Bluff 71601	535-2372
RD.	Russell, Allen R.	12 Southern Pines Drive, Pine Bluff 71601 (Res.)	534-6481
OBG	Simmons, Calvin R.	1714 W. 42nd, Pine Bluff 71601	535-3213
GS.	Smith, Robert J.	817 Cherry, Pine Bluff 71601	535-1880
GS.	Stern, Howard S.	1315 Linden, Pine Bluff 71601	534-0342
GS.	Sullenberger, A. G.	1726 W. 42nd, Pine Bluff 71601	534-4407
IM.	Talbot, George B.	1421 Cherry, Pine Bluff 71601	535-2200
PATH.	Tisdale, Alfred D., Jr.	1515 W. 42nd, Pine Bluff 71601	535-6800
PD.	Townsend, Thomas E.	1420 W. 43rd, Pine Bluff 71601	534-6210
IM.	Tracy, C. Clyde	1421 Cherry, Pine Bluff 71601	535-2200
GS.	Wilkins, Walter J., Jr.	1421 Cherry, Pine Bluff 71601	535-2200
IM.	Wineland, H. L.	1710 Doctors Drive, Pine Bluff 71601	534-3561
PH.	Wooley, Ralph R.	P. O. Box 7267, Pine Bluff 71601	535-2142
A.	Worrell, Aubrey M., Jr.	1600 W. 42nd, Pine Bluff 71601	535-8200

JOHNSON COUNTY

FP.	Patterson, Jack T.	P. O. Box 66B, Clarksville 72830	754-8384
FP.	Pennington, Donald H.	P. O. Box 66B, Clarksville 72830	754-8384
FP.	Shrigley, Guy P.	P. O. Box 70, Clarksville 72830	754-2043
FP.	Underwood, Clyde H.	201 Rogers, Clarksville 72830	754-8333
FP.	West, Boyce W.	P. O. Box 66B, Clarksville 72830	754-8384

Type of Practice	Member's Name	Address	Telephone Number
LAFAYETTE COUNTY			
FP	Ditsch, Craig E.	214 Main, Stamps 71860	533-4461
FP	Lee, Willie J.	P. O. Box 276, Stamps 71860	533-4461
FP	Patton, Robert C.	214 Main, Stamps 71860	533-4461
G5	Strange, Vance M.	302 Thomas Street, Stamps 71860	533-4478
LAWRENCE COUNTY			
FP	Cruse, Edward J.	318 Main, Black Rock 72415	878-6209
RD	Dickey, A. B.	704 Northwest 3rd, Walnut Ridge 72476 (Res.)	886-5377
FP	Elders, John B.	321 Southwest 3rd, Walnut Ridge 72476	886-3162
P+	Hickman, James H.	4313 W. Markham, Little Rock 72205	666-0181
FP	Hughes, Joe E.	421 Southwest 3rd, Walnut Ridge 72476	886-5123
FP	Joseph, Ralph F.	421 Southwest 3rd, Walnut Ridge 72476	886-3211
FP	Lancaster, Ted S.	421 Southwest 3rd, Walnut Ridge 72476	886-3543
FP	Spades, Sebastian A.	421 Southwest 3rd, Walnut Ridge 72476	886-3252
LEE COUNTY			
FP	Fields, E. C.	77 W. Main, Marianna 72360	295-5244
FP	Gray, Dwight W.	110 W. Chestnut, Marianna 72360	295-3131
FP	McLendon, Mac.	P. O. Box 794, Marianna 72360	295-2711
LINCOLN COUNTY			
FP	Freeland, James W.	P. O. Box 159, Star City 71667	628-4226
FP	Petty, Richard C.	P. O. Box 580, Star City 71667	628-4292
LITTLE RIVER COUNTY			
FP	Armstrong, James D.	P. O. Box 397, Ashdown 71822	898-3306
FP	Peacock, N. W., Jr.	P. O. Box 397, Ashdown 71822	898-3306
FP	Pullig, Thomas A.	P. O. Box 397, Ashdown 71822	898-3306
FP	Shelton, Joe G., Jr.	P. O. Box 397, Ashdown 71822	898-3306
LOGAN COUNTY			
FP	Chalfant, Charles H.	114 W. 4th, Booneville 72927	675-2455
FP	Daniel, William R.	114 W. 4th, Booneville 72927	675-2455
FP	Smith, Charles McD.	710 N. Express, Paris 72855	963-2191
FP	Smith, James T.	P. O. Box 286, Paris 72855	963-2191
LONOKE COUNTY			
FP	Camp, Arthur W.	P. O. Box 475, Hazen 72064	255-3321
FP	Gartman, Joseph F.	100 Court Street, Carlisle 72024	552-7561
FP	Holmes, B. E.	305 W. Front, Lonoke 72086	676-6560
FP	Inman, Fred C., Jr.	521 N. Williams, Carlisle 72024	552-7575
FP	Morrison, Doyle H.	P. O. Box 993, Cabot 72023	843-3549
CD	Schumann, Gerald M.	Des Arc 72040	256-4312
FP	Washburn, C. Yulan	P. O. Box H, Cabot 72023	843-3579
MILLER COUNTY			
R	Andrews, A. E.	P. O. Box 689, Texarkana 75501	794-3732
G5	Bransford, Robert M.	300 E. 6th, Texarkana 75501	774-3211
PD	Burnett, James W.	414 Hazel, Texarkana 75501	774-7301
PD	Burroughs, James C.	300 E. 6th, Texarkana 75501	774-3211
PATH	Chappell, Robert H.	P. O. Box 1288, Texarkana 75501	214-794-5921
PD	Cowan, Noel W.	300 E. 6th, Texarkana 75501	774-3211
GS	Duncan, Donald L.	P. O. Box 778, Texarkana 75501	774-3211
IM	Goesl, Andrew G.	803 Pine Street, Texarkana 75501	214-792-6946
PD	Hall, Jon D.	300 E. 6th, Texarkana 75501	774-3211
G5	Harrell, William B., Jr.	317 State Line Avenue, Texarkana 75501	214-792-8231
O8G	Harrison, Jack W.	P. O. Box 778, Texarkana 75501	774-3211
OR	Hughes, Mary W.	1001 Main, Texarkana 75501	214-792-6976
OR	Hughes, Robert P.	300 E. 6th, Texarkana 75501	774-3211
FP	Jamison, Garland U.	610 Hazel Street, Texarkana 75501	774-4912
O8G	Jones, John W.	300 E. 6th, Texarkana 75501	774-3211
FP	Kemp, Karlton H.	408 Hazel, Texarkana 75501	774-5181
RD	Kirkpatrick, R. R.	2403 Briar Rose Drive, Texarkana 75501 (Res.)	774-4954
FP	Kittrell, James B.	1001 Main Street, Texarkana 75501	214-794-6107
ANES	Laws, John K.	P. O. Box 1140, Texarkana 75501	774-7297
PD	Lowe, Betty A.	300 E. 6th, Texarkana 75501	774-3211
R	McGinnis, Robert S., Sr.	4800 Texas Boulevard, Texarkana 75501	214-792-7151
OPH	Newton, Norris L.	602 Main, Texarkana 75501	214-792-8541
IM	Rodgers, Nathaniel L.	300 E. 6th, Texarkana 75501	774-3211
R	Royal, Jack L.	300 E. 6th, Texarkana 75501	774-3211
FP	Rushing, Louis U.	P. O. Box 1837, Texarkana 75501	214-792-1191
FP	Short, Harold H.	1400 College Drive, Texarkana 75501	214-793-5671
RD	Smith, W. Decker	2300 Laurel, Texarkana 75501 (Res.)	NF
FP	Stringfellow, Jerry B.	1205 E. 35th, Texarkana 75501	773-6745
U	Teasley, Gerald H.	300 E. 6th, Texarkana 75501	774-3211
PATH	Wicker, Eugene H.	315 E. 5th, Texarkana 75501	774-2121
	Wilhelm, Frieda	Dallas, Texas	
G5	Wren, Herbert B.	4800 Texas Boulevard, Texarkana 75501	214-792-7151
U	Yarbrough, C. P.	1102 Main, Texarkana 75501	214-793-5608
G5	Young, Mitchell	1406 College Drive, Texarkana 75501	214-792-8264
MISSISSIPPI COUNTY			
PH	Beasley, Joseph E.	N. 10th, Blytheville 72315	763-7064
	Bell, David L.	Tulsa, Oklahoma	
IM	Brock, Charles C., Jr.	527 N. 6th, Blytheville 72315	763-8118
U	Campbell, C. E., Jr.	501 Hutson, Blytheville 72315	763-0855
FP	Cole, C. R.	519 N. 6th, Blytheville 72315	763-1554
FP	Cullom, Sumner R.	P. O. Box 68, Osceola 72370	563-6568
G5	Elliott, John Q.	209 W. Ash, Blytheville 72315	763-4548
FP	Fairley, Eldon	P. O. Box 68, Osceola 72370	563-6568
FP	Fairley, Julian	P. O. Box 68, Osceola 72370	563-6568
R	Gratz, John F., Jr.	Osceola Memorial Hospital, Osceola 72370	563-2611
FP	Green, W. O., Jr.	P. O. Box 268, Blytheville 72315	763-6802
EM	Hard, John W.	Chickasawba Hospital, Blytheville 72315	763-5111
PATH	Hart, Sybil R.	10th and Division, Blytheville 72315	763-5111
R	Hart, Wade A.	10th and Division, Blytheville 72315	763-5111
FP	Holcomb, C. E.	511 N. 6th, Blytheville 72315	763-3922

Type of Practice	Member's Name	Address	Telephone Number
FP	Hubener, L. L.	509 Hutson, 8lytheville 72315	762-2021
	Hubener, Louis F.	Gainesville, Florida	
IM	Jones, Herbert	529 N. 10th, 8lytheville 72315	763-8032
IM	Massey, L. D.	307 W. Hale, Osceola 72370	563-6242
FP	Osborne, Merrill J.	527 N. 6th, 8lytheville 72315	763-8118
FP	Pollock, George D.	608 W. Lee, Osceola 72370	563-2608
FP	Rhodes, R. F.	608 W. Lee, Osceola 72370	563-2608
FP	Rodman, Tasker N.	P. O. Box 260, Leachville 72438	539-6337
FP	Shaneyfelt, E. A.	P. O. Box 630, Manila 72442	561-4421
GS	Sims, Hunter C., Jr.	525 N. 10th, 8lytheville 72315	763-0521
	*Sims, Hunter C., Sr.	8lytheville	
FP	Smith, Ronald D.	527 N. 6th, 8lytheville 72315	763-8118
FP	Utley, F. E.	515 N. 6th, 8lytheville 72315	763-4575
OPH-OTO	Webb, James J.	520 W. Main, 8lytheville 72315	762-2131
O8G	Workman, W. Wayne	527 N. 6th, 8lytheville 72315	763-8118

MONROE COUNTY

FP	Dalton, Marvin L.	110 S. Main, Brinkley 72021	734-4161
FP	David, N. C., Jr.	108 W. Ash, Brinkley 72021	734-2212
FP	Olaimy, A. N.	200 W. Cedar, Brinkley 72021	734-4137
FP	Pupsta, Benedict F.	108 N. 2nd, Clarendon 72029	747-3321
FP	Stone, Herd E.	P. O. Box A, Holly Grove 72069	462-3393
FP	Walker, Walter L.	114 S. New Orleans, Brinkley 72021	734-2342
FP	Williams, J. P., Jr.	127 S. New Orleans, Brinkley 72021	734-1331

NEVADA COUNTY

FP	Avery, Charles D.	427 E. 6th, Prescott 71857	887-2625
FP	Crow, H. Blake	327 E. 2nd, Prescott 71857	887-3846
FP	Hairston, G. G.	P. O. Box 675, Prescott 71857	887-2211
FP	Harrell, L. J.	117 E. 2nd, Prescott 71857	887-2312

OUACHITA COUNTY

	Colyar, W. O., Jr.	Vestavia, Alabama	
FP	Dedman, J. L.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Drewrey, L. E.	430 Magnolia, Camden 71701	836-6811
ANES	Ellis, Joseph L.	P. O. Box 126, Camden 71701	836-7144
GS	Fohn, Charles H.	415 Hospital Drive, S.W., Camden 71701	836-5013
FP	Guthrie, James	530 Jefferson, S.W., Camden 71701	836-5058
FP	Hout, Judson N.	530 Jefferson, S.W., Camden 71701	836-5058
GS	Jameson, J. B.	110 Harrison, S.W., Camden 71701	836-5088
FP	Kendall, J. R.	353 Cash Road, Camden 71701	836-5794
FP	Killough, Larry R.	353 Cash Road, Camden 71701	836-8101
FP	Livingston, Bill B.	416 Hospital Drive, Camden 71701	836-7367
FP	Meek, Tom J.	VA Hospital, North Little Rock 72114	372-8361
RD	Miller, John H.	816 Clifton, N.W., Camden 71701 (Res.)	836-2549
IM	Ozment, Lowell V.	415 Hospital Drive, Camden 71701	836-5013
FP	Sanders, Cal R.	353 Cash Road, Camden 71701	836-5794
R	Thorne, A. E., Jr.	Ouachita Hospital, Camden 71701	836-9321

PHILLIPS COUNTY

FP	Barrow, John H.	614 Oakland Avenue, Helena 72342	338-8622
FP	Bell, L. J. Patrick	626 Poplar, Helena 72342	338-8163
OPH-OTO	Berger, Alfred A.	801 Perry, Helena 72342	338-8781
R	Biggs, William W.	Helena Hospital, Helena 72342	338-6411
RD	Buffs, James W.	708 McDonough, Helena 72342 (Res.)	338-8006
FP	Capes, Bernard	130 Plaza, West Helena 72390	572-2621
FP	Chrestman, Reuben L., Jr.	631 Oakland Avenue, Helena 72342	338-3294
FP	Ellis, William A.	603 Porter, Helena 72342	338-3037
FP	Faulkner, H. N.	513 Porter, Helena 72342	338-7401
P	Fisher, Donald E.	318 Tyler, West Memphis 72301	735-6923
FP	Hill, William K.	P. O. Box 277, Elaine 72333	827-3461
FP	Kirkman, C. M. T.	1105 Perry, Helena 72342	338-8712
FP	Miller, Robert D.	616 Elm Street, Helena 72342	338-8531
FP	McCarty, C. P.	513 Porter, Helena 72342	338-7401
FP	McDaniel, M. A.	513 Porter, Helena 72342	338-7401
FP	Oldham, H. B.	104 S. 3rd, West Helena 72390	572-7581
FP	Paine, W. T.	671 Oakland Avenue, Helena 72342	572-6413
FP	Tonymon, Daniel	P. O. Box 278, Marvell 72366	829-2721
FP	Wise, James E., Jr.	P. O. Box 66, Marvell 72366	829-2386

POLK COUNTY

FP	Austin, Calvin D.	1210 DeQueen, Mena 71953	394-1441
FP	Hefner, David P.	518 Janssen Street, Mena 71953	394-3550
PD	Murphy, Garland D., III	1210 DeQueen, Mena 71953	394-1441
FP	Redman, Pierre P.	513 Mena Street, Mena 71953	394-2277
FP	Rogers, Henry N.	600 W. 7th, Mena 71953	394-3344
FP	Stephens, Maurice L.	1210 DeQueen, Mena 71953	394-1441
GS	Wood, John P.	907 Mena, Mena 71953	394-4221

POPE-YELL COUNTY

FP	Ashcraft, Ted E.	2524 W. Main, Russellville 72801	968-7170
GS	Bachman, David S.	3005 W. Main Place, Russellville 72801	968-2345
U	Bell, Robert A.	Skyline Medical Building, Russellville 72801	968-3323
ANES	Birum, Patricia J.	P. O. Box 785, Russellville 72801	968-5670
FP	Bull, L. J.	P. O. Box 217, Plainview 72857	272-4236
R	Burgess, James G.	105 E. 11th, Russellville 72801	968-7930
FP	Carter, James M.	3005 W. Main Place, Russellville 72801	968-2345
GS	Crumpler, Joe B.	3005 W. Main Place, Russellville 72801	968-2345
RD	Draeger, Louis A.	Highway 27 E, Danville 72833 (Res.)	495-2770
IM	Franklin, Robert M.	3005 W. Main Place, Russellville 72801	968-2345
OPH	Gardner, Ellis	P. O. Box 400, Russellville 72801	968-2242
FP	Gavlas, Frank E.	310 N. 2nd, Dardanelle 72834	229-4225
FP	Green, Terry G.	505 Union, Dardanelle 72834	229-4172
FP	Harbison, James D.	505 Union, Dardanelle 72834	229-4172
FP	Harris, Walter P.	Dan-Ark Village, Danville 72833	495-2714
RD	Heidgen, Martin F.	118 Cambridge Place, Little Rock 72207 (Res.)	227-5107
FP	Henry, J. A.	3005 W. Main Place, Russellville 72801	968-2345
OR	Honghiran, Ted	Route 3, Box 12A, Russellville 72801	968-3200
GS	Kimball, G. Howard	1919 W. Main, Russellville 72801	968-3611
R	King, John W.	105 E. 11th, Russellville 72801	968-7930
FP	King, W. Ernest, Jr.	3005 W. Main Place, Russellville 72801	968-2345
OR	Kolb, James M., Jr.	Skyline Drive, Russellville 72801	968-2124
FP	Lane, W. H., Jr.	525 Water Street, Dover 72837	331-2828

Type of Practice	Member's Name	Address	Telephone Number
OPH.	Lovell, Richard K., Sr.	P. O. Box 400, Russellville 72801.	968-2242
FP.	Lowrey, D. H.	809 W. Main, Russellville 72801.	968-2156
FP.	Luker, Jerome H.	505 Union, Dardanelle 72834.	229-4172
OPH.	Lyford, Joe H., Jr.	P. O. Box 400, Russellville 72801.	968-2242
FP.	Malone, G. E.	733 W. Main, Atkins 72823.	641-2992
FP.	Martin, Damon G. H.	P. O. Box 328, Ola 72853.	489-5801
FP.	Maupin, James L.	505 Union, Dardanelle 72834.	229-4172
RD.	Millard, Roy I.	1704 W. 3rd Court, Russellville 72801 (Res.)	968-2604
EENT.	Mobley, Max J.	P. O. Box 400, Russellville 72801.	968-2242
RD.	McNamara, William L.	2121 Towson, Fort Smith 72901 (Res.)	785-1441
FP.	New, Kenneth O.	3005 W. Main Place, Russellville 72801.	968-2345
	Newsom, Jon K.	Florida	
FP.	Pennington, James O.	P. O. Box 68, Ola 72853.	489-5241
FP.	Ring, Gene D.	Route 2, Box 144E, Dardanelle 72834.	229-4172
FP.	Russell, James D.	505 Union, Dardanelle 72834.	229-4172
PATH.	Stolz, Gerald A.	1800 W. Main, Russellville 72801.	968-6781
	*Teeter, Brooks R.	Russellville	
FP.	Teeter, Stanley D.	3005 W. Main Place, Russellville 72801.	968-2345
IM.	Wilkins, Charles F., Jr.	3005 W. Main Place, Russellville 72801.	968-2345
FP.	Williams, David M.	809 W. Main, Russellville 72801.	968-2156
OBG.	Williams, W. M., Jr.	3005 W. Main Place, Russellville 72801.	968-2345

PULASKI COUNTY

ANES	Abbott, William W.	St. Vincent Infirmary, Little Rock 72201.	661-3578
GE.	Abraham, James H.	500 N. University, Little Rock 72207.	664-3600
NS.	Adamez, John H.	750 Medical Towers Building, Little Rock 72205.	225-0880
IM.	Adamson, James S.	900 N. University, Little Rock 72207.	664-3600
OPH.	Alford, T. Dale	5700 W. Markham, Little Rock 72205.	664-5100
OBG.	Allen, D. B.	500 S. University, Little Rock 72205.	664-4131
OBG.	Allen, E. Stewart	1100 N. University, Little Rock 72205.	664-9191
TS.	Allen, John E., Jr.	1000 Medical Towers Building, Little Rock 72205.	227-4700
PS.	Allen, Thomas H. "Bill"	413 N. University, Little Rock 72205.	664-0900
FP.	Anderson, Leslie F.	2 Crestview Plaza, Jacksonville 72076.	982-4551
#.	Arkins, James.	5th and Cedar, Little Rock 72205.	664-8484
GS.	Armstrong, Howard M.	9600 W. 12th, Little Rock 72205.	227-7888
+	Atienza, Ranulfo	4301 W. Markham, Little Rock 72205.	664-5000
PATH.	Atkinson, William E.	500 S. University, Little Rock 72205.	661-3371
RD.	Ault, Charles C.	1810 W. Long 17th, North Little Rock 72114 (Res.)	374-0748
PD.	Austin, L. K., Jr.	6213 Lee Avenue, Little Rock 72205.	664-4044
RD.	Autry, Daniel H.	1900 N. Tyler, Little Rock 72207 (Res.)	664-2332
OTO+	Aycock, Alan E.	4301 W. Markham, Little Rock 72205.	664-5000
GS.	Baber, John C., Jr.	500 S. University, Little Rock 72205.	664-2434
P.	Backus, Joe T.	12115 Hinson Road, Little Rock 72207.	227-0680
OTO.	Bailey, H. A. Ted, Jr.	1200 Medical Towers Building, Little Rock 72205.	227-5050
FP.	Baker, Charles R.	4301 W. Markham, Little Rock 72205.	664-7768
PATH.	Baker, Glen F.	P. O. Box 5507, Little Rock 72205.	666-9478
U.	Baker, Johnson J.	500 S. University, Little Rock 72205.	664-4365
IM.	Baldrige, John A.	350 Medical Towers Building, Little Rock 72205.	227-5388
PD.	Baldwin, Deane G.	6213 Lee, Little Rock 72205.	664-4044
OBG.	Barclay, David L.	4301 W. Markham, Little Rock 72205.	664-5000
R.	Barnhard, Howard J.	4301 W. Markham, Little Rock 72205.	664-5000
FP.	Barron, Edwin N., Jr.	7915 Cantrell Road, Little Rock 72207.	225-9222
GS.	Bauer, Frank M.	500 S. University, Little Rock 72205.	664-2245
R.	Bearden, James R.	1100 Medical Towers Building, Little Rock 72205.	374-3351
+	Beckman, James S. Jr.	4301 W. Markham, Little Rock 72205.	664-5000
OPH.	Becquet, Norbert J.	115 W. 6th, Little Rock 72201.	375-4419
FP.	Beknap, Melvin L.	1801 Maple, North Little Rock 72114.	758-1002
NP.	Bennett, Eaton W.	4313 W. Markham, Little Rock 72205.	666-0181
GS.	Berry, Fred B.	500 S. University, Little Rock 72205.	664-9116
P.	Betts, Charles S.	780 Medical Towers Building, Little Rock 72205.	227-7240
GS.	Bevans, David W., Jr.	406 Pershing Boulevard, North Little Rock 72114.	758-1620
ANES.	Beverly, Nolan F.	St. Vincent Infirmary, Little Rock 72201.	661-3578
+	Bicher, Haim.	4301 W. Markham, Little Rock 72205.	664-5000
P.	Biondo, Raymond V.	P. O. Box 921, North Little Rock 72115.	758-2588
CD.	Bishop, William B.	900 N. University, Little Rock 72207.	664-3600
IJ.	Bissada, Nabil K.	4301 W. Markham, Little Rock 72205.	664-5000
IM.	Bissett, Joe K.	300 E. Roosevelt, Little Rock 72206.	372-8361
FP.	Bizzell, Ross	215 Exchange Building, Little Rock 72201.	376-2309
U.	Black, Hal R., Jr.	9600 W. 12th, Little Rock 72205.	225-9755
FP.	Black, H. Thurston	123 N. Van Buren, Little Rock 72205.	666-0142
FP.	Black, Millard W.	705 N. Ash, Little Rock 72205.	663-5413
RD.	Blakely, R. M.	211 Crystal Court, Little Rock 72205 (Res.)	663-2562
OR.	Blankenship, William F.	405 N. University, Little Rock 72205.	664-1500
N.	Boellner, Samuel W.	300 Medical Towers Building, Little Rock 72205.	227-4750
NS.	Boop, Warren C., Jr.	4301 W. Markham, Little Rock 72205.	664-5000
ADM.	Bost, Roger B.	404 National Old Line Building, Little Rock 72201.	371-1001
OR.	Bowker, John H.	4301 W. Markham, Little Rock 72205.	664-5000
IM.	Boyd, Charles M.	4301 W. Markham, Little Rock 72205.	664-5000
NP.	Boyle, Ronald H.	12115 Hinson Road, Little Rock 72207.	227-0680
U.	Bradburn, Curry B., Jr.	9600 W. 12th, Little Rock 72205.	225-9755
R.	Brenner, George H., Jr.	1100 Medical Towers Building, Little Rock 72205.	374-3351
PD.	Briggs, Barney P.	500 S. University, Little Rock 72205.	664-4117
PD.	Briggs, Dale D.	500 S. University, Little Rock 72205.	664-0804
IM.	Brinkley, Roy A.	9600 W. 12th, Little Rock 72205.	222-6350
OTO.	Brizzolara, A. J.	500 S. University, Little Rock 72205.	664-4381
P.	Broach, R. Fred.	12115 Hinson Road, Little Rock 72207.	227-0680
RD.	Brown, Martha M.	2014 Boulevard, Little Rock 72204 (Res.)	663-7697
U.	Brown, T. Duell.	1120 Marshall, Little Rock 72202.	375-3376
GE.	Browning, Donald G.	409 N. University, Little Rock 72205.	664-6980
ADM.	Bruce, Thomas A.	4301 W. Markham, Little Rock 72205.	664-5000
GS.	Buchanan, F. R.	500 S. University, Little Rock 72205.	664-4324
PD.	Buchanan, Gilbert A.	500 S. University, Little Rock 72205.	664-4117
GS.	Buchman, Joseph A.	500 S. University, Little Rock 72205.	666-0222
CD.	Bullock, Robert T.	4301 W. Markham, Little Rock 72205.	664-5000
ANES.	Bumpas, Joe H.	St. Vincent Infirmary, Little Rock 72201.	661-3000
PATH.	Burger, Robert A.	9600 W. 12th, Little Rock 72205.	227-2888
P.	Busby, John V.	12115 Hinson Road, Little Rock 72207.	227-0680
ANES.	Byrd, Lucas M., Jr.	36 Lakeshore Drive, Little Rock 72204.	565-6046
OPH.	Calcote, Robert A.	218 Donaghey Building, Little Rock 72201.	374-5969
GS.	Caldwell, Fred T., Jr.	4301 W. Markham, Little Rock 72205.	664-5000
FP.	Calhoun, Julian D.	Box 805, Jacksonville 72076.	982-4551
R.	Calhoun, Joseph D.	500 S. University, Little Rock 72205.	664-3914
GS.	Campbell, Gilbert S.	4301 W. Markham, Little Rock 72205.	664-5000
R.	Campbell, James W.	500 S. University, Little Rock 72205.	664-3915

Type of Practice	Member's Name	Address	Telephone Number
A	Caplinger, Kelsy J.	P. O. Box S675, Little Rock 72205.	227-5210
P	Carnahan, Robert G.	4313 W. Markham, Little Rock 72205.	666-0181
A	Cazort, Alan G.	P. O. Box S675, Little Rock 72205.	227-5210
OR	Chakales, Harold H.	405 N. University, Little Rock 72205.	664-1500
OPH	Chandler, Billy M.	406 W. Pershing, North Little Rock 72114.	758-1651
P	Chappell, Ewin S.	4313 W. Markham, Little Rock 72205.	666-0181
FP	Cheairs, D. B.	9600 W. 12th, Little Rock 72205.	227-6363
RD	Choate, Hoyt	1100 Kavanaugh, Little Rock 72205 (Res.)	663-4362
U	Christeson, William W.	300 E. Roosevelt, Little Rock 72206.	372-8361
OR	Christian, John D.	1100 N. University, Little Rock 72207.	664-7710
FP	Chudy, Amail	1801 Maple, North Little Rock 72114.	758-1002
FP	Church, B. L.	321 Maple, North Little Rock 72114.	374-7796
OBG	Church, Marion M.	410 Pershing, North Little Rock 72114.	758-1022
ANES	Clark, Richard B.	4301 W. Markham, Little Rock 72205.	664-5000
FP	Cobb, Jock S.	North Hills Family Clinic, Sherwood 72116.	835-6800
OTO	Colclasure, Joe B.	1200 Medical Towers Building, Little Rock 72205.	227-5050
I	Collie, W. R.	4301 W. Markham, Little Rock 72205.	664-5000
NP	Conroy, Norman H.	4313 W. Markham, Little Rock 72205.	666-0181
OPH	Cook, Raymond C.	601 Scott, Little Rock 72201.	375-8273
PD	Cooper, James O.	4301 W. Markham, Little Rock 72205.	664-5000
GS	Cooper, W. G.	500 S. University, Little Rock 72205.	666-0149
	*Cope, Ellis P.	Little Rock	
OBG	Cornell, Paul J.	500 S. University, Little Rock 72205.	664-2277
PM	Cornett, James K.	5326 W. Markham, Little Rock 72205.	664-6603
OPH	Cosgrove, K. W., Jr.	516 Scott, Little Rock 72201.	374-6338
CR	Craig, M. S.	500 S. University, Little Rock 72205.	666-0106
OBG	Crews, J. Travis	500 S. University, Little Rock 72205.	664-8505
OPH	Cross, J. B.	500 S. University, Little Rock 72205.	666-0126
IM	Cullen, Philip T.	500 S. University, Little Rock 72205.	664-4171
RD	Cummins, Bryce	31 Broadmoor, Little Rock 72204 (Res.)	565-7450
R	Dalrymple, Glenn V.	4301 W. Markham, Little Rock 72205.	664-5000
FP	Darwin, William G.	6924 Geyer Springs, Little Rock 72209.	562-1463
OTO+	Davie, S. A.	4301 W. Markham, Little Rock 72205.	664-5000
GS	Dean, Gilbert O., Sr.	403 Donaghey Building, Little Rock 72201.	375-5543
R	Deed, Eleanor P.	4301 W. Markham, Little Rock 72205.	664-5000
OPH	Deer, Philip J., Jr.	601 Scott, Little Rock 72201.	375-8273
IM+	Deere, Linda F.	4301 W. Markham, Little Rock 72205.	664-5000
ADM	Dennis, James L.	4301 W. Markham, Little Rock 72205.	663-3482
NS	Dickins, Robert D., Jr.	750 Medical Towers Building, Little Rock 72205.	225-0880
PATH	Dilday, Thomas F.	P. O. Box 5507, Little Rock 72205.	666-9478
IM	Dildy, Hal R.	500 S. University, Little Rock 72205.	664-8111
FP	Dillard, Daniel C.	3500 S. University, Little Rock 72204.	562-4838
R	Diner, Wilma C.	4301 W. Markham, Little Rock 72205.	664-5000
R	Dodd, Dooyne, Jr.	1100 Medical Towers Building, Little Rock 72205.	227-5240
OBG	Dodge, Eva F.	4815 W. Markham, Little Rock 72205.	661-2242
GS	Dolan, Patrick A.	4301 W. Markham, Little Rock 72205.	664-5000
R+	Doss, L. L., III	4301 W. Markham, Little Rock 72205.	664-5000
P	Douglas, Warren M.	12115 Hinson Road, Little Rock 72207.	227-0680
GS	Downs, John W.	500 S. University, Little Rock 72205.	666-5922
U	Downs, Ralph A.	500 S. University, Little Rock 72205.	664-1762
PATH	Druet, Robert L.	1700 W. 13th, Little Rock 72202.	374-3351
PD	Dungan, William T.	4301 W. Markham, Little Rock 72205.	664-5000
FP	Durham, James W.	P. O. Box 805, Jacksonville 72076.	982-4551
PH	Easley, Edgar J.	4815 W. Markham, Little Rock 72205.	663-2123
OR	Easter, Rex M.	601 N. University, Little Rock 72205.	666-0144
FP+	Eisenach, R. Jeffrey	5t. Vincent Infirmary, Little Rock 72201.	661-3000
FP	Evans, Gilbert C.	4942 W. Markham, Little Rock 72205.	664-4127
FP	Farmer, Joseph F.	9501 Rodney Parham, Little Rock 72207.	225-2594
FP	Farris, Guy R.	6213 Lee, Little Rock 72205.	664-2115
FP+	Faulkner, Larry R.	4301 W. Markham, Little Rock 72205.	664-5000
OTO	Fein, Norman N.	110 E. 7th, Little Rock 72201.	374-8441
FP	Fewell, Ronald D.	P. O. Box 459, Jacksonville 72076.	982-2141
GS	Fielder, Charles R.	406 Pershing, North Little Rock 72114.	758-1620
I	Figueroa, Jorge M.	4301 W. Markham, Little Rock 72205.	664-5000
R	Fincher, Robert L.	1100 Medical Towers Building, Little Rock 72205.	227-5240
FP	Fitzgibbon, Carney, Jr.	410 S. Martin, Little Rock 72205.	666-8861
FP	Flack, James V.	424 N. University, Little Rock 72205.	664-4810
NS	Flanigan, Stevenson.	4301 W. Markham, Little Rock 72205.	664-5000
NS	Flanigin, Herman F.	4301 W. Markham, Little Rock 72205.	664-5000
P	Fletcher, Elizabeth D.	4313 W. Markham, Little Rock 72205.	666-0181
NS	Fletcher, Thomas M., Jr.	500 S. University, Little Rock 72205.	664-3021
OBG	Floyd, Bill G.	9600 W. 12th, Little Rock 72205.	227-7555
FP	Fortson, Wayne E.	6924 Geyer Springs, Little Rock 72209.	562-1463
FP	Foster, Julian L.	3500 South University, Little Rock 72204.	562-4838
U	Fraiser, L. P.	9600 W. 12th, Little Rock 72205.	225-9755
OPH	Fraunfelder, F. T.	4301 W. Markham, Little Rock 72205.	664-5000
D	Fulmer, H. Ray	1414 Donaghey Building, Little Rock 72201.	374-1649
OPH	Fulmer, John M.	5410 W. Markham, Little Rock 72205.	664-3142
IM	Fulton, William L.	513 Main, North Little Rock 72114.	375-2433
N	Galbraith, Robert C.	300 Medical Towers Building, Little Rock 72205.	227-4750
+	Garner, Carl C.	4301 W. Markham, Little Rock 72205.	664-5000
OTO	Gay, Ellery C., Jr.	1200 Medical Towers Building, Little Rock 72205.	227-5050
NS	Giles, Wilbur M.	750 Medical Towers Building, Little Rock 72205.	225-0880
GYN	Gillespie, A. T.	500 S. University, Little Rock 72205.	664-9555
PD	Glenn, Robert E.	516 W. Pershing, North Little Rock 72114.	758-1530
ANES	Glenn, Wayne B.	St. Vincent Infirmary, Little Rock 72201.	661-3000
IM	Glover, Lawson E.	900 N. University, Little Rock 72207.	664-3600
R	Glover, William C.	1100 Medical Towers Building, Little Rock 72205.	376-6241
P	Good, Henry H.	12115 Hinson Road, Little Rock 72207.	227-0680
PDA	Gordon, Vida H.	4301 W. Markham, Little Rock 72205.	664-5000
PD	Gosser, Bob L.	516 W. Pershing, North Little Rock 72114.	758-1530
GS	Graham, G. Grimsley	5326 W. Markham, Little Rock 72205.	663-9433
IM	Graupner, Kathryn I.	VA Hospital, North Little Rock 72114.	372-8361
R	Gray, Edwin F.	1310 Cantrell Road, Little Rock 72201.	375-5381
IM	Greutter, John E.	1014 Donaghey Building, Little Rock 72201.	372-6139
+	Griffin, Rodney L.	4301 W. Markham, Little Rock 72205.	664-5000
OR	Grimes, H. Austin	P. O. Box 5270, Little Rock 72205.	666-9491
GS	Growdon, James H.	500 S. University, Little Rock 72205.	664-4146
FP	Gustavus, John L.	3423 Pike Avenue, North Little Rock 72118.	753-3661
OBG	Hagler, James L.	500 S. University, Little Rock 72205.	664-5330
I	Haisten, James A. S.	4301 W. Markham, Little Rock 72205.	664-5000
IM	Hall, Alastair D.	500 S. University, Little Rock 72205.	664-0027
ANES	Harger, C. Harold	P. O. Box 5668, Little Rock 72205.	225-0753
IM	Harper, Ernest H.	900 N. University, Little Rock 72207.	664-3600
	Harrel, J. A., Jr.	Atlanta, Georgia	

Type of Practice	Member's Name	Address	Telephone Number
P.	Harrendorf, Cagle	500 S. University, Little Rock 72205	663-6346
R.	Harris, Donald R.	4301 W. Markham, Little Rock 72205	664-5000
IM	Harris, Michael N.	400 W. Pershing, North Little Rock 72114	664-3600
N+	Harris, Ruben M.	4301 W. Markham, Little Rock 72205	664-5000
P.	Harris, T. Stuart	12115 Hinson Road, Little Rock 72207	227-0680
R.	Harris, William T.	500 S. University, Little Rock 72205	664-3916
FP	Harris, Willie R.	5326 W. Markham, Little Rock 72205	666-2851
P.	Harrison, Roy E.	8824 Chicot Road, Little Rock 72209	562-8600
FP	Harrison, Vale	930 Medical Towers Building, Little Rock 72205	227-7433
PATH	Harville, William E.	9600 W. 12th, Little Rock 72205	227-2888
P.	Hawley, Harold B.	500 S. University, Little Rock 72205	664-9020
GS	Hayden, William F.	500 S. University, Little Rock 72205	664-2434
PS	Hayes, Harry, Jr.	500 S. University, Little Rock 72205	666-2811
R.	Haynes, W. Ducote	500 S. University, Little Rock 72205	664-3914
U.	Headstream, James W.	500 S. University, Little Rock 72205	664-4365
P.	Hearnsberger, Henry G., Jr.	4313 W. Markham, Little Rock 72205	666-0961
FP	Hedges, Harold H.	424 N. University, Little Rock 72205	664-4810
A.	Hefley, Bill F.	P. O. Box 5675, Little Rock 72205	227-5210
P.	Henker, Fred O.	4301 W. Markham, Little Rock 72205	664-5000
GYN	Henry, Charles R.	500 S. University, Little Rock 72205	664-4191
OPH	Henry, Forrest, Jr.	516 Scott, Little Rock 72201	374-6338
N	Henry, G. Morrison	4301 W. Markham, Little Rock 72205	664-5000
PD	Henry, Robert L.	6213 Lee, Little Rock 72205	664-4044
ANES	Hickey, Joseph P.	P. O. Box 7573, Little Rock 72207	664-2496
OBG	Hill, Ed Noble	5323 J. F. Kennedy Boulevard, North Little Rock 72116	753-3430
FP	Hodges, William B.	1800 Maple, North Little Rock 72114	758-1450
OPH+	Hof, C. William	4301 W. Markham, Little Rock 72205	664-5000
R.	Holder, John C.	4301 W. Markham, Little Rock 72205	664-5000
GS	Hollenberg, Henry G.	500 S. University, Little Rock 72205	664-4747
P.	Hollis, Nicholas T.	P. O. Box 4042, Little Rock 72204	664-3926
FP+	Hollis, Thomas H.	4301 W. Markham, Little Rock 72205	664-5000
FP	Holmes, Harlan C.	1160 Medical Towers Building, Little Rock 72205	225-6123
GS	Holt, L. Gordon	5326 W. Markham, Little Rock 72205	666-9442
FP	Honeycutt, Thomas D.	4124 W. 11th, Little Rock 72204	664-4389
D.	Honeycutt, W. Mage	500 S. University, Little Rock 72205	664-4161
GS	Hoover, Paul W.	1120 Marshall, Little Rock 72202	374-0789
P+	Hotchkiss, Robert L.	4313 W. Markham, Little Rock 72205	666-0181
P.	Howard, John G., Jr.	790 Medical Towers Building, Little Rock 72205	227-6370
N	Howell, Coburn S., Jr.	300 Medical Towers Building, Little Rock 72205	227-4750
	*Hudgins, Paul T.	Little Rock	
OR	Hundley, John M.	412 Cross, Little Rock 72201	375-5338
FP+	Huskins, John A.	9600 W. 12th, Little Rock 72205	227-2000
OR	Hutson, Harold G.	9600 W. 12th, Little Rock 72205	227-4151
ADM	Jackson, George W.	4313 W. Markham, Little Rock 72205	666-0181
FP	Jackson, M. A.	1304 Wright Avenue, Little Rock 72206	374-7940
D.	Jansen, G. Thomas	500 S. University, Little Rock 72205	664-4161
P.	Jenkins, James A.	1100 N. University, Little Rock 72207	664-8440
PATH	Johnson, B. Richard	9600 W. 12th, Little Rock 72205	227-2888
IM	Johnson, Henry D.	500 S. University, Little Rock 72205	664-4171
FP	Johnson, J. Albert	112 N. Bailey, Jacksonville 72076	982-4525
OR	Johnson, Philip H.	P. O. Box 5270, Little Rock 72205	666-9491
A.	Johnston, Thomas G.	5326 W. Markham, Little Rock 72205	664-3904
P+	Jones, Edwin C.	4301 W. Markham, Little Rock 72205	664-5000
PD	Jones, Jerry G.	500 S. University, Little Rock 72205	664-0804
OR	Jones, Kenneth G.	P. O. Box 5270, Little Rock 72205	666-9491
GS	Jones, Robert D.	500 S. University, Little Rock 72205	664-4747
D.	Jones, William N.	500 S. University, Little Rock 72205	664-0418
NS+	Jordan, F. Richard	4301 W. Markham, Little Rock 72205	664-5000
N	Jordan, William K.	500 S. University, Little Rock 72205	663-6353
NS	Jouett, W. Ray	750 Medical Towers Building, Little Rock 72205	225-0880
R.	Joyce, John W.	1100 Medical Towers Building, Little Rock 72205	227-5240
RD	Junkin, Ruth H.	P. O. Box 4066, North Little Rock 72116 (Res.)	753-9370
FP	Kagy, John K.	5th and Cedar, Little Rock 72205	664-8484
IM	Kahn, Alfred, Jr.	1300 W. 6th, Little Rock 72201	374-5589
FP+	Kang, Lakhbir	4301 W. Markham, Little Rock 72205	664-5000
PMR	Keeler, Keith C.	12th and Marshall, Little Rock 72201	227-3532
D.	Keeran, Michael G.	500 S. University, Little Rock 72205	664-4161
FP	Kennedy, Charles H.	3115 J. F. Kennedy Boulevard, North Little Rock 72116	753-9464
PD	Kennedy, H. Frazier	500 S. University, Little Rock 72205	664-4117
OR	Kettelkamp, Donald B.	4301 W. Markham, Little Rock 72205	664-5000
GS	Kilbury, Merlin J., Jr.	9600 W. 12th, Little Rock 72205	227-6840
RD	Kilbury, Merlin J., Sr.	6109 Greenwood Road, Little Rock 72207 (Res.)	663-5213
FP	Kirby, Jesse M.	6924 Baucum Pike, North Little Rock 72117 (Res.)	945-3055
PDA	Kittler, Fred J.	P. O. Box 5675, Little Rock 72205	227-5210
ANES	Kolb, Agnes C.	1150 Medical Towers Building, Little Rock 72205	227-7590
P.	Kolb, W. Payton	230 Medical Towers Building, Little Rock 72205	225-0887
P.	Kozberg, Oscar	4313 W. Markham, Little Rock 72205	666-0181
OBG	Kreth, Kay M.	5800 W. Markham, Little Rock 72205	663-9441
FP	Kroft, Vadee V.	7319 Baseline Road, Little Rock 72209	562-2938
GS	Kumpuris, Frank G.	415 N. University, Little Rock 72205	664-1521
	*Kuykendall, Sam J.	Little Rock	
ENT	Kyser, James F.	900 Medical Towers Building, Little Rock 72205	663-9423
	*Lamb, William A.	Little Rock	
R.	Lane, John W.	1100 Medical Towers Building, Little Rock 72205	227-5240
R.	Langston, Harold D.	1100 Medical Towers Building, Little Rock 72205	227-2770
FP	Laurenzana, Donald A.	North Hills Family Clinic, Sherwood 72116	835-6800
RD	Lawson, Mason G.	200 Ridgeway, Little Rock 72205 (Res.)	663-4834
A.	Lee, J. Fred	8704 Labette, Little Rock 72204 (Res.)	225-6158
FP	Leonard, Garnett J.	3115 J. F. Kennedy Boulevard, North Little Rock 72116	753-9464
OR	Lester, Joe K.	1518 Main, North Little Rock 72114	375-0102
IM	Levy, Jerome S.	500 S. University, Little Rock 72205	664-4181
CD	Lewis, W. Sexton	700 Medical Towers Building, Little Rock 72205	227-4434
R.	Lile, Henry A.	1100 Medical Towers Building, Little Rock 72205	227-5240
GS	Lincoln, Ben M.	5326 W. Markham, Little Rock 72205	663-9433
U.	Logan, Charles W.	500 S. University, Little Rock 72205	664-4364
OR	Logue, Richard M.	601 N. University, Little Rock 72205	666-0144
N.	Lucy, Dennis D., Jr.	4301 W. Markham, Little Rock 72205	664-5000
GS	Ludwig, Frank R.	406 W. Pershing, North Little Rock 72114	758-1620
FP	Mallory, George L., Jr.	4511 Lynch Drive, North Little Rock 72117	945-9271
IM+	Malott, Jerry D.	4301 W. Markham, Little Rock 72205	664-5000
IM	Marecek, Raymond L.	900 N. University, Little Rock 72207	664-3600
FP	Marvin, Horace N., Jr.	8824 Chicot Road, Little Rock 72209	562-8600
HEMA	Massey, C. Garnett	1120 Medical Towers Building, Little Rock 72205	227-6770
PDA	Matthews, Joe W.	P. O. Box 5675, Little Rock 72205	227-5210
P.	Matthews, Robert R.	4301 W. Markham, Little Rock 72205	664-5000
ANES	Means, Paul N.	1150 Medical Towers Building, Little Rock 72205	227-7590

Type of Practice	Member's Name	Address	Telephone Number
N.	Miles, David A.	500 S. University, Little Rock 72205.	664-3018
OR	Millard, I. Leighton.	P. O. Box 5270, Little Rock 72205.	666-9491
NEPH.	Miller, C. Lindsey.	1120 Medical Towers Building, Little Rock 72205.	227-6770
FP.	Miller, Forrest B., Jr.	3500 S. University, Little Rock 72204.	562-4838
	Miller, Harold N.	Port Charlotte, Florida	
IM.	Miller, Raymond P.	5918 Lee, Little Rock 72205.	664-2500
ENT	Milner, E. L.	500 S. University, Little Rock 72205.	664-4318
ADM.	Mitchell, George K.	P. O. Box 2181, Little Rock 72203.	378-2242
R+	Mittelstaedt, Carol.	4301 W. Markham, Little Rock 72205.	664-5000
NS.	Moore, Jim J.	500 S. University, Little Rock 72205.	664-4560
U.	Moore, J. Malcolm.	500 S. University, Little Rock 72205.	664-4364
FP.	Moore, Rex N.	P. O. Box 459, Jacksonville 72076.	982-2141
IM.	Moore, Robert B.	5918 Lee, Little Rock 72205.	664-2500
OM.	Moore, Robert W.	Remington Arms Company, Inc., Lonoke 72086.	374-2245
OBG	Morgan, Frank E.	410 Pershing Boulevard, North Little Rock 72114.	758-1022
IM.	Morris, Woodbridge E.	5326 W. Markham, Little Rock 72205.	664-2111
R.	Morrison, James R.	500 S. University, Little Rock 72205.	664-3914
OR.	Mulhollan, James S.	500 S. University, Little Rock 72205.	664-1222
R+	Munos, Louis R.	4301 W. Markham, Little Rock 72205.	664-5000
FP.	Murphy, James E.	1800 Maple, North Little Rock 72114.	758-1640
P.	Murphy, Randolph.	4313 W. Markham, Little Rock 72205.	666-0181
R.	McAdoo, Hosea W., Jr.	1100 Medical Towers Building, Little Rock 72205.	227-5240
OBG.	McCaskill, Melvin R.	500 S. University, Little Rock 72205.	664-4131
FP.	McClain, Monroe D.	VA Hospital, North Little Rock 72114.	372-8361
OBG.	McClintock, Everett M.	712 University Tower Building, Little Rock 72204.	664-0480
GS.	McCracken, John D.	1000 Medical Towers Building, Little Rock 72205.	227-4700
FP.	McCrary, George A.	2 Crestview Plaza, Jacksonville 72076.	982-4551
FP.	McGowan, Robert J., Jr.	424 N. University, Little Rock 72205.	664-4810
OTO.	McGrew, Robert N.	1200 Medical Towers Building, Little Rock 72205.	227-5050
FP+	McGuire, Sam A., III.	4301 W. Markham, Little Rock 72205.	664-5000
OR.	McKenzie, Charles N.	802 N. University, Little Rock 72205.	666-0251
OBG.	McKnight, C. Allen.	900 Medical Towers Building, Little Rock 72205.	227-5885
FP.	McMillin, F. Lamar, Sr.	1311 Louisiana, Little Rock 72202.	374-6531
TS.	McPhail, Jasper L.	214 Medical Arts Building, Little Rock 72202.	375-3747
FP.	Napper, George S.	513 Main, North Little Rock 72114.	375-2433
OR.	Nasca, Richard J.	1100 North University, Little Rock 72207.	664-7710
R.	Newbern, David H.	500 S. University, Little Rock 72205.	664-3914
D+	Niemann, Jeffrey.	4301 W. Markham, Little Rock 72205.	664-5000
RD.	Nisbett, James M.	517 E. 7th, Little Rock 72202 (Res.)	375-2252
OR.	Nixon, Ewing M.	9600 W. 12th, Little Rock 72205.	227-4150
R.	Norton, Joseph A.	8570 Cantrell Road, Little Rock 72207 (Res.)	664-3914
	Oates, Gordon P.	1612 Maryland, Little Rock 72202.	374-9332
FP.	Ogden, Mahlon D.	4601 Woodlawn, Little Rock 72205.	664-0769
P.	Oglesby, Walter R.	324 W. Pershing, North Little Rock 72114.	753-5180
IM.	O'Neal, Walter H.	9600 W. 12th, Little Rock 72205.	227-6350
PATH.	Orr, William S., Jr.	500 S. University, Little Rock 72205.	664-3043
GS.	Ozment, Kerry L.	1000 Medical Towers Building, Little Rock 72205.	227-4700
PATH.	Packmore, D. E.	St. Vincent Infirmary, Little Rock 72201.	661-3371
NS.	Padberg, Frank T.	55 E. Erie Street, Chicago, Illinois 60611.	312-787-8375
OTO.	Pappas, James J.	1200 Medical Towers Building, Little Rock 72205.	227-5050
OPH.	Parker, J. Mayne.	500 S. University, Little Rock 72205.	227-5222
PD.	Payne, William F.	500 S. University, Little Rock 72205.	664-0804
CD.	Pearce, Malcolm B.	4301 W. Markham, Little Rock 72205.	664-5000
PATH.	Pehrson, Nils C.	P. O. Box 5507, Brady Station, Little Rock 72205.	666-9478
CP.	Peters, John E.	4301 W. Markham, Little Rock 72205.	664-5000
OPH.	Phillips, Bert L.	1403 Main, North Little Rock 72114.	376-2840
GS.	Phipps, W. E.	P. O. Box 13, North Little Rock 72115.	374-4821
GS.	Pike, John D.	500 S. University, Little Rock 72205.	664-4321
ANES.	Pollard, A. E.	500 S. University, Little Rock 72205.	664-4532
FP+	Pollock, Charles B.	5th and Cedar, Little Rock 72205.	664-8484
R.	Pool, Chalmers S.	VA Hospital, North Little Rock 72114.	372-8361
PS.	Pope, Norton A.	850 Medical Towers Building, Little Rock 72205.	227-6464
OBG.	Porter, J. O.	500 S. University, Little Rock 72205.	664-4770
GE.	Power, Robert C.	409 N. University, Little Rock 72205.	664-6980
CD.	Price, Ben O.	500 S. University, Little Rock 72205.	664-2089
IM.	Pringos, Andrew A.	501 Woodlane, Little Rock 72201.	375-3231
IM.	Proctor, Clark B.	VA Hospital, North Little Rock 72114.	372-8361
FP.	Purdy, Harold D.	6924 Geyer Springs Road, Little Rock 72209.	562-1463
IM.	Pyle, Hoyte R., Jr.	5918 Lee, Little Rock 72205.	664-2500
PATH.	Quittner, Howard	4301 W. Markham, Little Rock 72205.	664-5000
PD.	Ramsay, Rex C.	4815 W. Markham, Little Rock 72205.	661-2242
FP.	Raney, Donald M.	P. O. Box 459, Jacksonville 72076.	982-2141
D.	Raque, Carl J.	500 S. University, Little Rock 72205.	664-4161
IM.	Rasch, James R.	900 N. University, Little Rock 72207.	664-3600
CD.	Read, Raymond C.	300 E. Roosevelt, Little Rock 72206.	372-8361
OBG.	Reaves, B. James.	4 Edgehill Road, Little Rock 72207.	663-1570
#.	Reddick, Eddie J.	4301 W. Markham, Little Rock 72205.	664-5000
U.	Redman, John F.	4301 W. Markham, Little Rock 72205.	664-5000
OBG.	Reed, Ewing C., Jr.	9600 W. 12th, Little Rock 72205.	227-6377
R+	Reese, Robert L.	4301 W. Markham, Little Rock 72205.	664-5000
FP+	Reese, Ronald.	4301 W. Markham, Little Rock 72205.	664-5000
P.	Reese, William G.	4301 W. Markham, Little Rock 72205.	664-5000
R.	Regnier, George.	500 S. University, Little Rock 72205.	664-3914
GS.	Relyea, William V.	112 N. Bailey, Jacksonville 72076.	982-4525
R.	Rhinehart, William J.	500 S. University, Little Rock 72205.	664-3914
GS.	Richardson, Robert E.	500 S. University, Little Rock 72205.	664-4321
GS.	Richmond, Samuel V.	927 Donaghey Building, Little Rock 72201.	372-5101
FP.	Riddle, John F., Jr.	8824 Chicot Road, Little Rock 72209.	562-8600
FP.	Riegler, Nicholas W., Jr.	1024 Scott, Little Rock 72202.	375-3326
R.	Riggs, Orval E.	P. O. Box 7863, Pine Bluff 71601.	535-6800
FP.	Riley, William H.	3500 S. University, Little Rock 72204.	562-4838
P.	Ringdahl, I. C.	4301 W. Markham, Little Rock 72205.	664-5000
FP.	Ritchie, Elmer J.	1401 Main, North Little Rock 72114.	372-5253
IM.	Robins, Rowland R.	VA Hospital, North Little Rock 72114.	372-8361
	Rockwell, Wayne L.	Little Rock	
OBG.	Rodgers, C. Dudley.	500 S. University, Little Rock 72205.	664-4131
FP.	Rodgers, Charles H.	3500 S. University, Little Rock 72204.	562-4838
OBG.	Rodgers, Clyde D.	500 S. University, Little Rock 72205.	664-4131
OBG.	Roman-Lopez, Juan J.	500 S. University, Little Rock 72205.	664-4191
OR.	Rooney, Thomas P.	501 W. 25th, North Little Rock 72114.	758-2046
RD.	Rosenbaum, Carl A.	Route 1, Box 274, Scott 72142 (Res.)	961-9228
OR.	Ross, Ashley S.	500 S. University, Little Rock 72205.	664-1222
GYN.	Ross, Robert W.	417 N. University, Little Rock 72205.	664-8200
HEMA.	Ross, S. William.	900 N. University, Little Rock 72207.	664-3600
	Rothert, Frances C.	Guatemala City, Guatemala	

Type of Practice	Member's Name	Address	Telephone Number
OTO	Rounsaville, Harry L.	500 S. University, Little Rock 72205.	664-4381
OPH	Roy, F. Hampton	390 Medical Towers Building, Little Rock 72205.	227-6980
PATH	Rozell, Allen R.	500 S. University, Little Rock 72205.	661-3371
R	Rubin, Sanford A.	4301 W. Markham, Little Rock 72205.	664-5000
EENT	Ruggles, Dwayne L.	520 W. 26th, North Little Rock 72114.	758-6560
OR	Runyan, W. A.	9600 W. 12th, Little Rock 72205.	227-4150
	*Samuel, John M.	Little Rock	
RD	Sanderlin, Joe H.	624 Legato, Little Rock 72205 (Res.)	225-2074
TS	Satterfield, John V., III.	500 S. University, Little Rock 72205.	664-6050
P	Schneider, Mildred F.	VA Hospital, North Little Rock 72114.	372-8361
FP	Schratz, Bruce E.	1801 Maple, North Little Rock 72114.	758-1002
OPH	Schroeder, George T.	5700 W. Markham, Little Rock 72205.	664-4455
IM	Schultz, John C.	900 N. University, Little Rock 72207.	664-3600
GS	Schwander, Howard	9600 W. 12th, Little Rock 72205.	227-7200
OPH	Schwarz, W. J.	405 N. University, Little Rock 72205.	664-5354
OR	Selakovich, W. G.	500 S. University, Little Rock 72205.	666-2824
	Setliff, Don P.	San Diego, California	
P	Shannon, Robert F.	4301 W. Markham, Little Rock 72205.	664-5000
ADM	Shorey, Winston K.	4301 W. Markham, Little Rock 72205.	664-5000
OR	Shuffield, H. Elvin.	9600 W. 12th, Little Rock 72205.	227-4150
	Silverblatt, C. W.	Tampa, Florida	
O&G	Simmons, Orman W.	9600 W. 12th, Little Rock 72205.	227-7555
IM	Simpson, N. Henry.	441 Donaghey Building, Little Rock 72201.	375-2801
NP	Sims, James M.	324 W. Pershing, North Little Rock 72114.	753-5180
GS	Sipes, Frank M.	403 Donaghey Building, Little Rock 72201.	375-5543
R	Slayden, John E.	4301 W. Markham, Little Rock 72205.	664-5000
ANES	Sloan, Fay M.	1150 Medical Towers Building, Little Rock 72205.	227-7590
O&G	Sloan, James M.	500 S. University, Little Rock 72205.	664-2277
OPH+	Smead, William J.	4301 W. Markham, Little Rock 72205.	664-5000
P	Smith, Aubrey C.	12115 Hinson, Little Rock 72207.	227-0680
FP	Smith, Huie H.	1517 Main, North Little Rock 72114.	374-7011
OPH	Smith, James L.	623 Woodlane, Little Rock 72201.	374-6491
OPH	Smith, Joe E.	7107 W. 12th, Little Rock 72204.	666-8627
FP	Smith, John McCollough.	4000 Woodlawn, Little Rock 72205.	666-6570
ENT	Smith, John W.	1415 W. 6th, Little Rock 72201.	372-0036
GYN	Smith, Mose, III.	5326 W. Markham, Little Rock 72205.	664-1527
R	Smith, Phillip L.	4301 W. Markham, Little Rock 72205.	664-5000
A	Smith, Purcell, Jr.	P. O. Box 5675, Little Rock 72205.	227-5210
GE	Smith, Thomas J.	409 N. University, Little Rock 72205.	664-6980
PD	Smith, Thomas W.	500 S. University, Little Rock 72205.	664-4117
OTO	Smith, Tom.	330 Medical Towers Building, Little Rock 72205.	227-4863
	Snodgrass, William A., Jr.	Mobile, Alabama	
OR	Sorrells, R. Barry.	P. O. Box 5270, Little Rock 72205.	666-9491
PD+	Sotomora, Ricardo F.	4301 W. Markham, Little Rock 72205.	664-5000
RD	Spitzberg, Irving J.	307 N. Cedar, Little Rock 72205 (Res.)	663-6877
FP	Springer, Worthie R., Jr.	1624 Maryland, Little Rock 72202.	374-2635
GS	Stainton, Robert M.	500 S. University, Little Rock 72205.	664-4175
IM	Stanley, Joe P.	Pike Plaza Center, North Little Rock 72114.	376-4023
RD	Stathakis, John A.	Quapaw Tower Apartments, Little Rock 72202 (Res.)	372-0098
OR	Steele, William L.	1100 N. University, Little Rock 72207.	664-7710
PH	Steinkamp, Ruth C.	4815 W. Markham, Little Rock 72205.	661-2235
P	Stephens, Wanda J.	1090 Medical Towers Building Little Rock 72205	225-9750
I	Stephens, William H.	4301 W. Markham, Little Rock 72205.	664-5000
TS	Stewart, Bill D.	415 N. University, Little Rock 72205.	664-1521
FP	Stotts, John R.	5905 "R" Street, Little Rock 72207.	663-9415
FP	Strauss, Alvin W., Jr.	1026 Donaghey Building, Little Rock 72201.	372-1828
FP+	Strode, Steven W.	4301 W. Markham, Little Rock 72205.	664-5000
PD	Stroope, George F.	516 W. Pershing, North Little Rock 72114.	758-1530
PS	Stuckey, James G.	500 S. University, Little Rock 72205.	664-4383
U	Suliman, J. Samir.	516 W. 26th, North Little Rock 72114.	758-6111
P	Sundermann, Richard H.	4301 W. Markham, Little Rock 72205.	664-5000
P	Sutton, Lewis R.	12115 Hinson Road, Little Rock 72207.	227-0680
PH	Swindoll, Bryant S.	4815 W. Markham, Little Rock 72205.	661-2124
IM	Taylor, Eugene H.	900 N. University, Little Rock 72207.	664-3600
RD	Taylor, James S.	Rivercliff Apartments Little Rock 72202	664-2005
PD	Teeter, John.	5808 W. Markham, Little Rock 72205.	664-1767
IM	Texter, E. Clinton, Jr.	4301 W. Markham, Little Rock 72205.	664-5000
OR	Thomas, Jerry L.	500 S. University, Little Rock 72205.	664-1222
GS	Thomas, Peter O.	1310 Cantrell Road, Little Rock 72201.	374-5703
GS	Thompson, Bernard W.	300 E. Roosevelt, Little Rock 72206.	372-8361
ANES	Thompson, Dola S.	4301 W. Markham, Little Rock 72205.	664-5000
OR	Thompson, Lawrence L.	1310 Cantrell Road, Little Rock 72201.	375-5381
P	Thompson, Robert M.	819 University Tower Building, Little Rock 72204.	664-2444
OR	Thompson, Samuel B.	1100 N. University, Little Rock 72207.	664-7710
ADM	Thorn, G. Max	St. Vincent Infirmary Little Rock 72201.	661-3154
FP	Tilley, Stephen.	5905 "R" Street, Little Rock 72207.	663-9415
R	Tirman, Robert M.	300 E. Roosevelt, Little Rock 72206.	372-8361
IM	Tolbert, Louis E., Jr.	500 S. University, Little Rock 72205.	666-0136
ADM	Towbin, Eugene J.	300 E. Roosevelt, Little Rock 72206.	372-8361
ANES	Tseng, Jyi-Ming	1150 Medical Towers Building, Little Rock 72205.	227-7590
FP	Tudor, John M., Jr.	5th and Cedar, Little Rock 72205.	664-8484
ANES	Valentine, Robert G.	201 W. 18th Street, North Little Rock 72114.	758-4806
ANES	Vaughter, W. Roger	3 Ken Circle, Little Rock 72207.	664-3789
FP	Wade, W. I.	424 N. University, Little Rock 72205.	664-4810
IM	Wagoner, Jack.	5918 Lee, Little Rock 72205.	664-2500
GYN	Wallace, Deane D.	500 S. University, Little Rock 72205.	664-5315
+	Wallace, Thomas R.	4301 W. Markham, Little Rock 72205.	664-5000
PD	Wallis, Charles.	5909 Country Club, Little Rock 72207 (Res.)	663-2132
GS	Walt, James R.	500 S. University, Little Rock 72205.	664-4146
ANES	Wang, Jerry S. Y.	940 Medical Towers Building, Little Rock 72205.	227-6904
ANES	Ward, Joseph P.	1150 Medical Towers Building, Little Rock 72205.	227-7590
FP	Ward, Mildred E.	5th and Cedar, Little Rock 72205.	664-5000
PD	Warford, Lloyd R.	6213 Lee, Little Rock 72205.	664-4044
NP	Warford, Walton R.	VA Hospital, North Little Rock 72114.	372-8361
RD	Washburn, Arthur M.	510 North Brookside, Little Rock 72205 (Res.)	225-5132
FP	Wassell, John R.	VA Hospital, North Little Rock 72114.	372-8361
OPH	Watkins, John G.	9600 W. 12th, Little Rock 72205.	227-6797
	*Watson, C. Fletcher.	Little Rock	
NS	Watson, Robert	750 Medical Towers Building, Little Rock 72205.	225-0880
FP	Weber, James R.	P. O. Box 188, Jacksonville 72076.	982-2108
IM	Wells, Travis L.	216 Donaghey Building, Little Rock 72201.	375-7121
GS	Wenger, Carl E.	9600 W. 12th, Little Rock 72205.	227-6363
GS	Westbrook, Kent C.	4301 W. Markham, Little Rock 72205.	664-5000
NP	Westerfield, Frank M., Jr.	230 Medical Towers Building, Little Rock 72205.	225-0777

Type of Practice	Member's Name	Address	Telephone Number
FP	White, Oba B.	200 Century Building, Little Rock 72201	374-3609
FP+	White, Phillip L.	4301 W. Markham, Little Rock 72205	664-5000
P	Whitehead, R. H., Jr.	4 Biscayne Court, Little Rock 72207 (Res.)	225-1925
PATH	Wilbur, E. Lloyd	9600 W. 12th, Little Rock 72205	227-2888
FP	Wilkes, Elbert H.	5322 W. Markham, Little Rock 72205	663-4114
TS	Williams, G. Doyne	4301 W. Markham, Little Rock 72205	664-5000
NS+	Williams, Ron	4301 W. Markham, Little Rock 72205	664-5000
ANES	Wilson, George E., Jr.	St. Vincent Infirmary, Little Rock 72201	661-3635
FP+	Wilson, Harold F.	5th and Cedar, Little Rock 72205	664-8484
CD	Wilson, James W. D.	500 S. University, Little Rock 72205	664-4166
OR	Wilson, John L.	601 N. University, Little Rock 72205	666-0144
OPH	Wilson, Ralph S.	4301 W. Markham, Little Rock 72205	664-5000
IM	Winn, Charles R.	9600 W. 12th, Little Rock 72205	227-6659
OBG	Wood, Gary P.	4301 W. Markham, Little Rock 72205	664-5000
FP	Wortham, T. H.	P. O. Box 459, Jacksonville 72076	982-2141
IM	Wynn, James O.	4301 W. Markham, Little Rock 72205	664-5000
FP+	Yen (Hsiao Fang), K. K.	9600 W. 12th, Little Rock 72205	227-2000
PATH	Young, Douglas E.	Baptist Medical Center, Little Rock 72201	227-2888
U	Young, Jerry M.	406 Pershing, North Little Rock 72114	758-1310
+	Young, Michael C.	St. Vincent Infirmary, Little Rock 72201	661-3000
P	Young, William O.	1100 N. University, Little Rock 72207	664-8440
D	Zell, Lawrence M.	937 Donaghey Building, Little Rock 72201	374-5158

RANDOLPH COUNTY

FP	Baltz, Albert L.	110 W. Broadway, Pocahontas 72455	892-3111
FP	Baltz, M. A.	110 W. Broadway, Pocahontas 72455	892-3111
FP	Barre, Hal S.	213 W. Broadway, Pocahontas 72455	892-3371
FP	DeClerk, Thomas B.	204 Thomasville, Pocahontas 72455	892-3344
FP	Scott, William W.	P. O. Box 585, Pocahontas 72455	892-3371
FP	Smith, Norman K.	107 Van Bibber, Pocahontas 72455	892-3389
GS	Wyllie, James J.	308 W. Broadway, Pocahontas 72455	892-5100

SALINE COUNTY

FP	Ashby, John W.	302 W. South, Benton 72015	778-4511
R	Ashby, Robert M.	Saline Memorial Hospital, Benton 72015	778-0611
GS	Baber, Quin, Jr.	105 McNeil, Benton 72015	778-7435
OM	Barbour, Victor H.	P. O. Box 300, Bauxite 72011	778-3644
FP	Bethel, James C.	300 E. Roosevelt, Little Rock 72206	372-8361
ADM	Callaway, James R.	Benton Unit, State Hospital 72158	778-1111
ADM	Cornwell, Samuel L.	Route 3, Box 225, Benton 72015	371-1906
OR	Duncan, J. Shelby	105 McNeil, Benton 72015	778-1388
FP	Hogue, F. Paul	302 W. South, Benton 72015	778-4511
	Hood, Robert H.	Tyler, Texas	
FP	Izard, Ralph	P. O. Box AA, Bryant 72022	847-0289
FP	Jones, Curtis W., Jr.	223 S. Market, Benton 72015	778-2722
FP	Jones, Curtis W., Sr.	223 S. Market, Benton 72015	778-2722
FP	Jones, Robert E.	225 S. Market, Benton 72015	778-3608
FP	Kirk, Marvin N.	P. O. Box 399, Benton 72015	778-8264
FP	Marindale, J. L.	323 Short Street, Benton 72015	778-1124
P	Mizell, Walter S.	Benton Unit, State Hospital 72158	778-1111
	McNichol, Ronald W.	Jamestown, North Dakota	
ANES+	Porter, Jim C.	4301 W. Markham, Little Rock 72205	664-5000
P	Richardson, William W.	2920 McClellan, Jonesboro 72401	972-4002
A	Rountree, Helen	P. O. Box 370, Benton 72015	778-0421
P+	Stocker, William J.	4313 W. Markham, Little Rock 72205	666-0181
OBG	Thibault, Frank G., Jr.	910 N. East, Benton 72015	778-0426
P	Thompson, John P.	Benton Unit, State Hospital 72158	778-1111
FP	Thorn, H. B., Jr.	302 W. South, Benton 72015	778-4511
GS	Viner, Donald L.	105 McNeil, Benton 72015	778-7435
FP	Wright, John D.	321 Short Street, Benton 72015	778-1119

SCOTT COUNTY

FP	Wright, Harold B.	P. O. Box 249, Waldron 72958	637-3111
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SEBASTIAN COUNTY

PD	Aclin, Richard R.	500 South 16th, Fort Smith 72901	783-0211
RD	Adams, W. F.	1100 Murta Road, Van Buren 72956 (Res.)	474-8668
OR	Alberty, Joe Paul	300 North Greenwood, Fort Smith 72901	783-0225
FP	Alexander, Richard K.	1311 South "I", Fort Smith 72901	441-4381
IM	Allen, George W.	320 N. Greenwood, Fort Smith 72901	782-3001
IM	Amsden, Thomas W.	1500 Dodson, Fort Smith 72901	782-4091
GS	Anderson, Paul M.	314 N. Greenwood, Fort Smith 72901	782-4066
OBG	Atkins, Jimmie G.	1500 Dodson, Fort Smith 72901	782-4091
FP	Bailey, Charles W.	P. O. Box 416, Greenwood 72936	996-4111
P	Baker, Max A.	924 Adelaide, Fort Smith 72901	785-1428
OPH	Bone, James L.	1500 Dodson, Fort Smith 72901	782-4091
D	Bradford, A. Calvin	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
R	Broadwater, John R.	1500 Dodson, Fort Smith 72901	782-4091
EM	Brown, Byron L.	1411 Rogers, Fort Smith 72901	782-3071
NS	Brown, James A.	1500 Dodson, Fort Smith 72901	782-4091
OR	Buie, James H.	1500 Dodson, Fort Smith 72901	782-4091
EM	Busby, James D.	1411 Rogers, Fort Smith 72901	782-3071
PD	Cabell, Ben B.	312 South 16th, Fort Smith 72901	782-7921
R	Cassady, Calvin R.	P. O. Box 1612, Fort Smith 72901	782-4091
P	Chambers, Donald S.	924 Adelaide, Fort Smith 72901	785-1428
ANES	Chamblin, Don W.	1500 Dodson, Fort Smith 72901	782-4091
TS	Clemmons, Edward E.	522 S. 16th, Fort Smith 72901	785-1413
ANES	Coffman, Edwin L.	1500 Dodson, Fort Smith 72901	782-4091
CR	Crigler, Ralph E.	1500 Dodson, Fort Smith 72901	782-4091
R	Crow, Neil E.	P. O. Box 1612, Fort Smith 72901	782-4091
EM	Cunningham, Charles S.	1311 S. "I", Fort Smith 72901	441-4381
EM	Darnall, Harley C.	1311 S. "I", Fort Smith 72901	441-4381
PATH	Davenport, Leo	922 Lexington, Fort Smith 72901	785-1447
P	Dorzab, Joe H.	924 Adelaide, Fort Smith 72901	785-1428
OBG	Ellis, Homer G.	P. O. Box 3507, Fort Smith 72901	785-2411
OPH	Faier, Samuel Z.	1500 Dodson, Fort Smith 72901	782-4091
HEMA	Fecher, Dennis R.	1500 Dodson, Fort Smith 72901	782-4091
U	Feder, Frederick P.	500 S. 14th, Fort Smith 72901	785-2604
FP	Feild, T. A., III	3600 N. "O", Fort Smith 72901	783-5158
OPH	Felker, Gary V.	912 Lexington, Fort Smith 72901	782-1023
PD	Floyd, Charles H.	617 S. 16th, Fort Smith 72901	783-3166
	*Foltz, Thomas P.	Fort Smith	
OTO	Gedosh, Edgar A.	600 S. 16th, Fort Smith 72901	782-6022
R	Gill, James A.	1500 Dodson, Fort Smith 72901	782-4091

Type of Practice	Member's Name	Address	Telephone Number
PDC	Gilliland, J. Campbell	1500 Dodson, Fort Smith 72901	782-4091
PATH	Girkin, R. Gene	922 Lexington, Fort Smith 72901	785-1447
RD	Goldstein, Davis W.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
ANES	Goodman, R. C.	1500 Dodson, Fort Smith 72901	782-4091
N	Griggs, William L., III	1500 Dodson, Fort Smith 72901	782-4091
OR	Hathcock, Alfred B.	1500 Dodson, Fort Smith 72901	782-4091
GS	Hawkins, S. Wright	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
U	Hewett, Archie L.	600 S. 14th, Fort Smith 72901	785-2604
GS	Hoge, Marlin B.	314 N. Greenwood, Fort Smith 72901	782-4066
IM	Holman, William A.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
GS	Holmes, W. C., Jr.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
IM	Holton, Jerry C.	Loma Linda, California	
IM	Hornberger, E. Z., Jr.	404 S. 16th, Fort Smith 72901	783-3159
OPH	Hughes, Robert P., Jr.	1214 N. "8", Fort Smith 72901	782-8892
R	Huskison, William T.	318 N. Greenwood, Fort Smith 72901	783-6174
O8G	Hyde, Marshall L.	P. O. Box 3507, Fort Smith 72901	785-2411
FP	Ingram, Ralph N.	1120 Lexington, Fort Smith 72901	785-2657
OR	Irwin, Peter J.	1500 Dodson, Fort Smith 72901	782-4091
GS	Janes, Robert H., Jr.	1500 Dodson, Fort Smith 72901	782-4091
EM	Jones, W. Duane	1311 South "I", Fort Smith 72901	441-4381
O8G	Kelsey, J. F.	P. O. Box 3507, Fort Smith 72901	785-2411
RD	Kennedy, Virgil N.	5417 Grand Avenue, Fort Smith 72901 (Res.)	452-3351
OR	Kirkpatrick, Hoyt, Jr.	1500 Dodson, Fort Smith 72901	782-4091
CD	Klopfenstein, Keith	1500 Dodson, Fort Smith 72901	782-4091
OR	Knight, William E.	1500 Dodson, Fort Smith 72901	782-4091
PATH	Koenig, A. Samuel, III	922 Lexington, Fort Smith 72901	785-1447
PATH	Koenig, Albert S., Jr.	922 Lexington, Fort Smith 72901	785-1447
O8G	Kradel, R. Paul	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
FP	Kramer, Ralph G.	603 Lexington, Fort Smith 72901	783-8917
RD	Krock, Fred H.	3700 Free Ferry, Fort Smith 72901 (Res.)	783-4832
FP	Kutait, Kemal E.	1120 Lexington, Fort Smith 72901	785-2655
IM	Lambiotte, Louis O.	1500 Dodson, Fort Smith 72901	782-4091
PATH	Landrum, Annette V.	500 Lexington, Fort Smith 72901	782-4983
GS	Landrum, Samuel E.	522 S. 16th, Fort Smith 72901	785-4181
OTO	Lane, Charles S., Jr.	600 S. 16th, Fort Smith 72901	782-6022
IM	LeBlanc, Joseph V.	Bartlesville, Oklahoma	
IM	Lewing, Hugh S.	P. O. Box 3006, Fort Smith 72901	783-3159
FP	Lilly, Ken	1120 Lexington, Fort Smith 72901	785-2655
NS	Lockhart, William G.	1500 Dodson, Fort Smith 72901	782-4091
GS	Lockwood, Frank M.	1500 Dodson, Fort Smith 72901	782-4091
OR	Long, James W.	1500 Dodson, Fort Smith 72901	782-4091
	Lynch, Robert E.	Tulsa, Oklahoma	
PD	Magness, Jack L., Jr.	312 S. 16th, Fort Smith 72901	782-7921
IM	Martin, Art B.	1500 Dodson, Fort Smith 72901	782-4091
FP	Martin, M. C. (Rick)	1120 Lexington, Fort Smith 72901	785-2655
O8G	Mason, J. N.	1500 Dodson, Fort Smith 72901	782-4091
IM	Masri, Hassan M.	1500 Dodson, Fort Smith 72901	782-4091
FP	Meador, Don M.	3600 N. "O", Fort Smith 72901	783-5158
R	Mendelsohn, E. A.	1500 Dodson, Fort Smith 72901	782-4091
GS	Mings, Harold H.	1500 Dodson, Fort Smith 72901	782-4091
OPH	Moulton, E. C., Jr.	1214 N. "8", Fort Smith 72901	782-8892
RD	Murchison, Roary A.	19 Haven Drive, Fort Smith 72901 (Res.)	782-5323
D	McCraney, H. C.	217 Lexington, Fort Smith 72901	783-0297
FP	McDonald, H. P.	2044 N. 29th, Fort Smith 72901	782-4833
OPH	McEwen, Stanley R.	1214 N. "B", Fort Smith 72901	782-8893
IM	McMinimy, D. J.	1500 Dodson, Fort Smith 72901	782-4091
ANES	Northum, Charles S.	1500 Dodson, Fort Smith 72901	782-4091
GS	Olson, John D.	1500 Dodson, Fort Smith 72901	782-4091
IM	Paris, Charles H.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
PD	Parker, Joel E., Jr.	617 S. 16th, Fort Smith 72901	783-3165
R	Parker, Thomas G.	318 N. Greenwood, Fort Smith 72901	783-6174
FP	Parra, H. John	3120 Jenny Lind, Fort Smith 72901	782-4986
TS	Patrick, Donald L.	1500 Dodson, Fort Smith 72901	782-4091
	*Patton, Gerald K.	Fort Smith	
N	Pellar, Donald H.	1500 Dodson, Fort Smith 72901	782-4091
IM	Pence, Eldon D., Jr.	320 N. Greenwood, Fort Smith 72901	782-3001
O8G	Phillips, W. P.	P. O. Box 3507, Fort Smith 72901	785-2411
FP	Pillstrom, L. G.	1120 Lexington, Fort Smith 72901	785-2655
IM	Poe, McDonald, Jr.	320 N. Greenwood, Fort Smith 72901	782-3001
CD	Pope, John R.	1500 Dodson, Fort Smith 72901	782-4091
PD	Post, James M., Jr.	617 S. 16th, Fort Smith 72901	783-3165
IM	Prewitt, Taylor A.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
IM	Price, Lawrence C.	404 S. 16th, Fort Smith 72901	783-3159
OTO	Raymond, Thomas H.	600 S. 16th, Fort Smith 72901	782-6022
R	Rogers, Paul L.	318 N. Greenwood, Fort Smith 72901	783-6174
ANES	Safranek, Edward J.	216-A N. Greenwood, Fort Smith 72901	783-1497
GS	Saviers, Boyd M.	1500 Dodson, Fort Smith 72901	782-4091
A	Schirmer, Roy E.	1420 S. "I", Fort Smith 72901	782-2983
O8G	Sherman, Robert L.	P. O. Box 3507, Fort Smith 72901	785-2411
FP	Shermer, J. P.	623 S. 21st, Fort Smith 72901	783-1520
FP	Shippey, W. L.	612 S. 24th, Fort Smith 72901	783-7227
	Sigler, John K.	Aurora, Colorado	
NP	Sims, Henry M.	608 N. Greenwood, Fort Smith 72901	783-4303
O8G	Smith, Douglas B.	P. O. Box 3507, Fort Smith 72901	785-2411
PATH	Smith, Kent	922 Lexington, Fort Smith 72901	785-1447
R	Snider, James R.	P. O. Box 1612, Fort Smith 72901	782-4091
OR	Stanton, William B.	300 N. Greenwood, Fort Smith 72901	783-0225
FP	Stewart, John B.	603 Lexington, Fort Smith 72901	783-8917
PS	Still, Eugene F., II	1500 Dodson, Fort Smith 72901	782-4091
FP	Swena, Richard R.	1322 N. "8", Fort Smith 72901	785-2425
O8G	Tate, William B.	1500 Dodson, Fort Smith 72901	782-4091
FP	Thompson, James B.	605 Lexington, Fort Smith 72901	782-6081
IM	Thompson, J. Kenneth	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
FP	Thompson, Robert J.	605 Lexington, Fort Smith 72901	782-6081
HEMA	Turner, William F.	1500 Dodson, Fort Smith 72901	782-4091
D	Vanderpool, Roy E.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
U	Wahman, Gerald E.	1500 Dodson, Fort Smith 72901	782-4091
OPH	Wallace, Kenneth K.	1214 N. "8", Fort Smith 72901	782-8892
PD	Watts, John C.	500 S. 16th, Fort Smith 72901	783-0211
IM	Wells, John D.	Waldron Road at Ellsworth, Fort Smith 72901	452-2077
ANES	Westermann, Norman F.	1500 Dodson, Fort Smith 72901	782-4091
O8G	Whitaker, T. J., Jr.	1823 Dodson, Fort Smith 72901	782-4929
IM	White, J. Earle	2702 Barry, Fort Smith 72901	783-3126
PH	Whittaker, L. A.	708 Lexington, Fort Smith 72901	785-2801

Type of Practice	Member's Name	Address	Telephone Number
OR	Wideman, John W.	300 N. Greenwood, Fort Smith 72901	783-0225
CS	Williams, Carl L.	522 S. 16th, Fort Smith 72901	785-1413
U	Wilson, Carl L.	1500 Dodson, Fort Smith 72901	782-4091
U	Wilson, Morton C.	1500 Dodson, Fort Smith 72901	782-4091
U	Wilson, Steven K.	1500 Dodson, Fort Smith 72901	782-4091
TS	Woods, Leon P.	1500 Dodson, Fort Smith 72901	782-4091
FP	Woods, William M.	P. O. Box 246, Huntington 72940	928-5060

SEVIER COUNTY

GS	Balch, James I.	P. O. Box 68, DeQueen 71832	584-2465
FP	Brown, O. D.	P. O. Box 890, DeQueen 71832	584-2465
FP	Buffington, Mike	P. O. Box 391, DeQueen 71832	584-2022
FP	City, Jim	P. O. Box 391, DeQueen 71832	584-2022
FP	Daniel, J. Frank	Highway 70 West, DeQueen 71832	584-2022
FP	Daugherty, Joe D.	P. O. Box 890, DeQueen 71832	584-2465
FP	Dickinson, Richard B.	302 N. 4th, DeQueen 71832	584-2344
FP	Dickinson, Rodger C.	302 N. 4th, DeQueen 71832	584-2344
FP	Jones, Charles N.	P. O. Box 391, DeQueen 71832	584-2022
FP	Joseph, Eugene A.	DeQueen Clinic, DeQueen 71832	584-2022
FP	Pullen, Wayne G.	P. O. Box 391, DeQueen 71832	584-2022
FP	Shukers, C. F., II	Town North, Professional Building, DeQueen 71832	584-2465

ST. FRANCIS COUNTY

FP	Bradley, Adron M.	P. O. Box 70, Forrest City 72335	633-1243
RD	Chaffin, E. J.	P. O. Box 667, Hughes 72348	339-2914
FP	Cogburn, H. N.	P. O. Box 4000, Forrest City 72335	633-1425
FP	Collins, E. Morgan	P. O. Box 989, Forrest City 72335	633-1952
FP	Collum, Grady R.	128 Broadway, Hughes 72348	339-2111
FP	Crawley, C. E.	P. O. Box 4000, Forrest City 72335	633-1425
FP	Davis, Patricia C.	Columbia, Tennessee	
FP	Fong, Fun H.	64 E. Main, Hughes 72348	339-2373
GS	Hammons, Edward P.	P. O. Box 4000, Forrest City 72335	633-1425
FP	Hollis, Herbert H.	317 N. Washington, Forrest City 72335	633-4209
FP	Laney, J. Neal	325 N. Washington, Forrest City 72335	633-4711
FP	Lockhart, David L.	P. O. Box 70, Forrest City 72335	633-1243
FP	McPhail, George T.	P. O. Box 989, Forrest City 72335	633-1952
FP	Sexton, G. A.	328 Kittel Road, Forrest City 72335	633-1425

UNION COUNTY

R	Burton, George C.	427 W. Oak, El Dorado 71730	863-9173
QR	Callaway, James C.	619 W. Grove, El Dorado 71730	863-5146
FP	Carroll, Peter J.	416 N. Newton, El Dorado 71730	862-5119
FP	Cathey, A. D.	112 W. Peach, El Dorado 71730	863-4128
U	Clark, James F.	524 W. Faulkner, El Dorado 71730	863-4267
FP	Clowney, A. R.	312 Thompson, El Dorado 71730	863-4101
P	Cullins, John G.	1412 S. Taylor Street, Little Rock 72204 (Res.)	663-8201
OTO	Cyphers, Charles D.	519 W. Faulkner, El Dorado 71730	862-3471
R	DeLany, C. Lea	Fulton County Hospital, Salem 72576	895-3226
FP	Dunn, Tom L.	P. O. Box 538, Hampton 71744	798-2241
PATH	Duzan, Kenneth R.	443 W. Oak, El Dorado 71730	862-1351
PATH	Elliott, Wayne G.	443 W. Oak, El Dorado 71730	862-1351
IM	Ellis, Jacob P.	714 W. Faulkner, El Dorado 71730	862-5184
OBG	Fitch, Leston E.	445 W. Oak, El Dorado 71730	863-7217
GS	Harper, John W.	425 W. Oak, El Dorado 71730	863-5135
OR	Hartmann, Ernest R.	619 W. Grove, El Dorado 71730	863-5146
GS	Henley, Paul G.	700 W. Faulkner, El Dorado 71730	863-4171
FP	Hill, Grady E.	427 W. Oak, El Dorado 71730	863-7158
U	Jameson, Sam G.	532 W. Faulkner, El Dorado 71730	862-6852
R	King, Billy D.	460 W. Oak, El Dorado 71730	863-2253
OPH	Landers, Gardner H.	318 Thompson, El Dorado 71730	862-4216
FP	Moore, Berry L., Jr.	615 W. Grove, El Dorado 71730	863-4185
GS	Moore, John H.	412 N. Washington, El Dorado 71730	862-3411
U	Murfee, Robert M.	427 W. Oak, El Dorado 71730	862-5439
PD	McKinney, J. Schuler	209 Thompson, El Dorado 71730	862-4994
GS	Pinson, John H., Jr.	312 Thompson, El Dorado 71730	863-4101
IM	Pirniqne, Allan S.	714 W. Faulkner, El Dorado 71730	862-5184
FP	Riley, Warren S.	526 W. Faulkner, El Dorado 71730	863-4508
PD	Rogers, Henry B.	209 Thompson, El Dorado 71730	862-4994
D	Sample, Dorothy C.	525 W. Faulkner, El Dorado 71730	862-5485
GS	Scurlock, William R.	412 N. Washington, El Dorado 71730	862-3411
FP	Seale, J. E., Jr.	528 W. Faulkner, El Dorado 71730	863-7154
ANES	Stevens, Willis M.	2200 W. Elm, El Dorado 71730 (Res.)	862-3828
OBG	Thibault, Frank G., Sr.	416 N. Newton, El Dorado 71730	862-5403
GS	Tommey, C. E.	412 N. Washington, El Dorado 71730	862-3412
OBG	Turnbow, R. L.	306 Thompson, El Dorado 71730	863-6157
FP	Warren, George W.	P. O. Box W, Smackover 71762	725-3471
IM	Weedman, James B.	714 W. Faulkner, El Dorado 71730	862-5184
GS	Wharton, J. B., Jr.	516 W. Faulkner, El Dorado 71730	862-4221
IM	Wilson, Larkin M.	714 W. Faulkner, El Dorado 71730	862-5184
OPH	Wilson, Paul H.	514 W. Faulkner, El Dorado 71730	862-5352
GS	Yocum, David M., Jr.	412 N. Washington, El Dorado 71730	862-3411

VAN BUREN COUNTY

FP	Hall, John A.	302 E. Main, Clinton 72031	745-2111
FP	Pearce, Charles G.	Clinton 72031	745-2412
FP	Read, Paul S.	P. O. Box 3186, Fairfield Bay 72153	884-3399
RD	Williams, John H.	2501 John Ashley Road, North Little Rock 72118	NF

WASHINGTON COUNTY

GS	Ahrend, Thomas R.	1749 N. College, Fayetteville 72701	521-3300
D	Albright, Spencer D., III	1925 Green Acres Road, Fayetteville 72701	443-3413
FP	Applegate, C. Stanley	220 Meadow Avenue, Springdale 72764	751-4637
RD	Baggett, Jeff J.	128 Buchanan, Prairie Grove 72753	846-2156
FP	Baker, Donald B.	Doctors Building, Fayetteville 72701	521-8260
FP	Box, Ivan H.	P. O. Box E, Huntsville 72740	738-2115
PATH	Boyce, John M.	609 W. Maple, Springdale 72764	751-5711
RD	Boyer, H. L.	107 N. Star, Lincoln 72744 (Res.)	824-3203
U	Brandon, H. B.	P. O. Box 1487, Fayetteville 72701	521-8980
RD	Brizzolara, Charles M.	5512 S. Grandview Road, Little Rock 72207 (Res.)	666-5977
U	Brooks, Walter Ely	P. O. Box 1487, Fayetteville 72701	521-8980
NP	Brown, Spencer H.	4313 W. Markham, Little Rock 72205	666-0181

Type of Practice	Member's Name	Address	Telephone Number
FP	Buckley, Carie D., Jr.	241 W. Spring, Fayetteville 72701	521-8260
PD	Burnside, Wade W.	207 E. Dickson, Fayetteville 72701	443-3471
RD	Butt, William J.	P. O. Box 1147, Fayetteville 72701 (Res.)	442-7563
FP	Capps, James A., Jr.	P. O. Box 48, Springdale 72764	751-4637
ANES	Chester, Robert L.	660 Lollar Lane, Fayetteville 72701	521-3050
OR	Coker, Tom P.	1673 N. College, Fayetteville 72701	521-2752
O8G	Cole, George R., Jr.	740 Lollar Lane, Fayetteville 72701	521-4433
OTO	Crocker, Theron R.	102 W. Dickson, Fayetteville 72701	521-1238
ADM	Day, John K.	Student Health Services, U of A, Fayetteville 72701	575-4451
	*DeLaney, Joseph P.	Gainesville, Florida	
ANES	Dodson, C. Dwight	946 California, Fayetteville 72701	443-3387
GS	Dorman, J. E.	1203 W. Sunset, Springdale 72764	756-6161
GS	Dorman, Jerry S.	P. O. Box 689, Springdale 72764	756-6161
FP	Dorman, John W.	1203 W. Sunset, Springdale 72764	756-6161
IM	Duncan, Philip E.	675 Lollar Lane, Fayetteville 72701	521-8200
NP	Edmisten, Jack	P. O. Box 1108, Fayetteville 72701	521-1221
R	Edmondson, Charles T.	Route 3, Box 253, Springdale 72764 (Res.)	751-0492
FP	Edmondson, Rogers P.	Route 1, Danville 72833 (Res.)	493-2421
FP	Etherington, Robert A.	41 Kingshighway, Eureka Springs 72632	253-9746
NP	Finch, Stephen B.	617 W. Dickson, Fayetteville 72701	443-3491
OTO	Fincher, G. Glen	2100 Green Acres Road, Fayetteville 72701	521-3363
A	Fincher, Martha H.	2100 Green Acres Road, Fayetteville 72701	521-3363
FP	Gardner, Buford M.	P. O. Box 730, Fayetteville 72701	443-5291
D	Ginger, John D.	1925 Green Acres, Fayetteville 72701	443-3413
IM	Hall, Joe B.	675 Lollar Lane, Fayetteville 72701	521-8200
O8G	Harrison, William F.	207 E. Dickson, Fayetteville 72701	442-5377
FP	Hart, Hamilton R.	241 W. Spring, Fayetteville 72701	521-8260
FP	Hathcock, Preston L.	240 N. Block, Fayetteville 72701	442-7333
D	Hayden, Carson R.	Evelyn Hills Shopping Center, Fayetteville 72701	442-9211
PD	Haynes, James E.	207 E. Dickson, Fayetteville 72701	443-3471
OPH	Henry, L. Murphey	P. O. Box 1267, Fayetteville 72701	442-5227
OPH	Henry, Louise M.	P. O. Box 1267, Fayetteville 72701	442-5227
OPH	Henry, Morris M.	P. O. Box 1225, Fayetteville 72701	442-5227
IM	Higginbotham, Hugh B.	675 Lollar Lane, Fayetteville 72701	521-8200
ANES	Horner, Glennon A.	1665 N. College, Fayetteville 72701	521-3832
NP	Jarvis, Fred D., Jr.	1031 N. College, Fayetteville 72701	442-5482
FP	Jones, Evelyn R.	VA Hospital, Fayetteville 72701	443-2301
FP	Jones, J. Laurence	Student Health Services, U of A, Fayetteville 72701	757-4451
	Joyce, Frederick E.	St. Paul, Minnesota	
OR	Kaylor, Coy C.	1673 N. College, Fayetteville 72701	521-2752
OR	Kendrick, Carl M.	1673 N. College, Fayetteville 72701	521-2752
A	Koehn, Laura J.	2100 Green Acres, Fayetteville 72701	521-3363
PD	Lawson, Wilbur G.	207 E. Dickson, Fayetteville 72701	442-6226
GYN	Lesh, Ruth E.	221 N. College, Fayetteville 72701	443-2343
RD	Lesh, Vincent O.	Route 6, Box 273, Rogers 72756 (Res.)	636-6811
O8G	Lushbaugh, Harmon	740 Lollar Lane, Fayetteville 72701	521-4433
O8G	Mashburn, James D.	207 E. Dickson, Fayetteville 72701	442-5377
IM	Moore, Arthur F.	675 Lollar Lane, Fayetteville 72701	521-8200
FP	Morgan, Tad M.	Quandt and Young Streets, Springdale 72764	751-9236
GS	Murry, J. Warren	1749 N. College, Fayetteville 72701	521-3300
OPH	McAllister, Max F.	18 E. Dickson, Fayetteville 72701	442-4011
FP	McEvoy, Francis E.	803 Quandt, Springdale 72764	751-9236
R	McKenzie, James G.	20 W. North, Fayetteville 72701	442-8211
PATH	Nettleship, Anderson	P. O. Box 817, Fayetteville 72701	443-3050
PATH	Nettleship, Mae B.	P. O. Box 817, Fayetteville 72701	443-3050
IM	Painter, M. B.	675 Lollar Lane, Fayetteville 72701	521-8200
OPH	Parker, Joe C.	700 S. Young Street, Springdale 72764	751-1028
FP	Parker, Lee B., Jr.	241 W. Spring, Fayetteville 72701	521-8260
FP	Patrick, James K.	241 W. Spring, Fayetteville 72701	521-8260
FP	Power, John R.	220 Meadow Avenue, Springdale 72764	751-4637
O8G	Rabon, Nancy A.	Evelyn Hills Shopping Center, Fayetteville 72701	442-8261
GS	Rolufs, Lloyd S.	41 Kingshighway, Eureka Springs 72632	253-9746
O8G	Romine, James C.	740 Lollar Lane, Fayetteville 72701	521-4433
TS	Rudko, Michael	908 Rolling Hills, Fayetteville 72701	521-6780
RD	Siegel, Lawrence H.	233 Oakwood, Fayetteville 72701 (Res.)	442-2083
OPH	Singleton, E. Mitchell	P. O. Box 1343, Fayetteville 72701	521-4843
FP	Sisco, Friedman	P. O. Box 65, Springdale 72764	751-4579
PATH	Slaven, John E.	P. O. Box 817, Fayetteville 72701	443-3050
FP	Smith, Austin C.	P. O. Box E, Huntsville 72740	738-2115
FP	Tubb, Norman G.	220 Meadow, Springdale 72764	751-4637
U	Turley, Jan T.	1300 Zion Road, Fayetteville 72701	521-8980
RD	Van Pelt, Ross	P. O. Box 126, Beaver 72613 (Res.)	253-8546
FP	Vinzant, John W.	22 E. Spring, Fayetteville 72701	443-3417
R	Ward, H. Wendell	1018 Sunset Drive, Fayetteville 72701 (Res.)	442-2219
FP	Wheat, Ed	130 N. Spring, Springdale 72764	751-5704
A	Whiteside, Edwin	P. O. Box 1208, Fayetteville 72701	443-5241
FP	Whiting, Tom D.	801 Quandt, Springdale 72764	751-9236
GS	Wood, Jack A.	1749 N. College, Fayetteville 72701	521-3300

WHITE COUNTY

FP	Adair, Thomas L.	P. O. Box 350, Bald Knob 72010	724-3220
R	Bell, John E.	1400 W. Pleasure, Searcy 72143	268-8500
FP	Bridges, Olen W.	607 Woodruff, Searcy 72143	268-5811
IM	Brown, A. R.	P. O. Box 1083, Searcy 72143	268-5364
FP	Dobbs, John C.	2900 Hawkins, Searcy 72143	268-5364
FP	Dodd, William C.	210 Elm Street, Bald Knob 72010	724-3240
FP	Edwards, Hugh R.	601 Woodruff, Searcy 72143	268-5811
R	Elliott, Robert E.	1400 W. Pleasure, Searcy 72143	268-8500
GS	Farrar, Henry C.	2900 Hawkins, Searcy 72143	268-5364
FP	Formby, Thomas A.	2900 Hawkins, Searcy 72143	268-5364
FP	Gardner, Jack R.	2900 Hawkins, Searcy 72143	268-5364
PATH	Golleher, James H.	910 E. Race, Searcy 72143	268-7186
RD	Hawkins, M. C., Jr.	Highway 36 West, Searcy 72143 (Res.)	268-2585
FP	Jackson, C. W.	P. O. Box C, Judsonia 72081	729-3435
IM	Johnson, David M.	2900 Hawkins, Searcy 72143	268-5364
FP	Kinley, J. Garrett	401 Center, Beebe 72012	882-3388
RD	Kinley, James D.	505 N. Main, Beebe 72012	882-5400
FP	Koch, C. W., Jr.	1407 E. Race, Searcy 72143	268-5845
FP	Loe, Arlis W.	607 Woodruff, Searcy 72143	268-7143
FP	Lowery, Benjamin R.	607 Woodruff, Searcy 72143	268-7143
FP	Maguire, Frank C., Jr.	200 S. 4th, Augusta 72006	347-2131
+	Morris, W. Dale	300 E. Roosevelt, Little Rock 72206	372-8361
FP	Norris, E. Lloyd	P. O. Box 640, Beebe 72012	882-3300

Type of Practice	Member's Name	Address	Telephone Number
IM.....	Palmer, H. C., Jr.	2900 Hawkins, Searcy 72143	268-5364
PATH.....	Pesnell, Larkus H.	P. O. Box 458, Searcy 72143	268-7186
FP.....	Ransom, C. E., Jr.	1407 E. Race, Searcy 72143	268-5845
GS.....	Rodgers, Porter R., Jr.	910 E. Race, Searcy 72143	268-2441
FP.....	Rodgers, Porter R., Sr.	607 Woodruff, Searcy 72143	268-5811
FP.....	Ross, Rex W.	2900 Hawkins, Searcy 72143	268-5364
RD.....	Sanford, Sloan M.	703 N. Spruce, Searcy 72143 (Res.)	268-8930
FP.....	Short, Harold	501 N. Main, Beebe 72012	882-5561
GS.....	Simpson, James A.	910 E. Race, Searcy 72143	268-2441
	*Sloan, Dewey W.	8eebe	
FP.....	Smith, Bernard C.	P. O. Drawer "C", Bradford 72020	344-2788
PD.....	Stinnett, J. L., Jr.	2900 Hawkins, Searcy 72143	268-5364
FP.....	Tate, Sidney W.	P. O. Box 486, Judsonia 72081	729-3435
IM.....	White, William D.	2900 Hawkins, Searcy 72143	268-5364

WOODRUFF COUNTY

FP.....	Harberg, Hyman	Cotton Plant 72036	459-3996
FP.....	Hendrixson, B. E.	306 E. 3rd, McCrory 72101	731-2511
FP.....	Morris, John W.	118 W. Main, McCrory 72101	731-2631
FP.....	Rowe, James	306 E. 3rd, McCrory 72101	731-2511

CODE FOR TYPE OF PRACTICE

A.....	Allergy	HEMA.....	Hematology	PD.....	Pediatrics
ADM.....	Administrative Medicine	I.....	Intern	PDA.....	Pediatric Allergy
ANES.....	Anesthesiology	IM.....	Internal Medicine	PDC.....	Pediatric Cardiology
CD.....	Cardiovascular Disease	N.....	Neurology	PH.....	Public Health
CP.....	Child Psychiatry	NEPH.....	Nephrology	PM.....	Preventive Medicine
CR.....	Colon and Rectal Surgery	NP.....	Neuropsychiatry	PMR.....	Physical Medicine-Rehabilitation
D.....	Dermatology	NS.....	Neurosurgery	PS.....	Plastic Surgery
ENT.....	Ear, Nose and Throat	OBG.....	Obstetrics and Gynecology	R.....	Radiology
EENT.....	Eye, Ear, Nose and Throat	OM.....	Occupational Medicine	RD.....	Retired
EM.....	Emergency Care	OPH.....	Ophthalmology	TS.....	Thoracic Surgery
FP.....	Family Practice	OR.....	Orthopedics	U.....	Urology
GE.....	Gastroenterology	OTO.....	Otolaryngology	+	Resident
GS.....	General Surgery	P.....	Psychiatry		
GYN.....	Gynecology	PATH.....	Pathology		

#—Senior Medical Student *—Deceased NF—No Telephone

INFORMATION OF INTEREST TO MEMBERSHIP

Mailing Addresses

Arkansas Medical Society Post Office Box 1208 Fort Smith, Arkansas 72901 Phone: 782-8218	Arkansas State Medical Board Dr. Joe Verser, Secretary Post Office Box 102 Harrisburg, Arkansas 72432 Phone: 578-2677	Legal Counsel Mr. Eugene Warren Arkansas Medical Society Tower Building Little Rock, Arkansas 72201 Phone: 374-9292	Arkansas Healing Arts Board Mr. Arch Ford, Secretary State Department of Education Little Rock, Arkansas 72201 Phone: 371-1469 (Basic Science Examinations)
American Medical Association 535 North Dearborn Street Chicago, Illinois 60610 Phone: 312-751-6000	Drug Enforcement Administration Bureau of Department of Justice 1 Union Plaza, #850 Little Rock, Arkansas 72201 Phone: 378-5265	Pulaski County Medical Society 311 Doctors Building Little Rock, Arkansas 72205 Phone: 664-3402	

Meeting Dates

Arkansas Medical Society	April 20-23, 1975	Arlington Hotel, Hot Springs
	April 25-28, 1976	Arlington Hotel, Hot Springs
American Medical Association	June 15-19, 1975	Atlantic City
	November 30-December 4, 1975	Honolulu
	June 26-July 1, 1976	Dallas
	December 4-8, 1976	Philadelphia

Arkansas Medical Society Group Insurance Plans

Malpractice	The St. Paul Companies Little Rock Service Office 1700 Worthen Bank Building Little Rock, Arkansas 72201 Phone: 376-4151
One Million Dollar Professional Catastrophe Liability Policy Professional Overhead Expense Plan Professional Men's Disability Plan	Rather, Beyer and Harper Insurance Agents 300 Spring Building Little Rock, Arkansas 72201 Phone: 372-4117
Life	Northwestern National Life Insurance Company Arkansas State Agency 401 Commercial National Bank Building Little Rock, Arkansas 72201 Phone: 372-3181
Medical, Surgical, Major Medical	Arkansas Blue Cross-Blue Shield Post Office Box 2181 Little Rock, Arkansas 72203 Phone: 378-2320 (Medicare) 378-2242 (Dr. Mitchell) 378-2164 (Dr. Benafield)
Workman's Compensation Dividend Plan	Dodson Insurance Group 92nd and State Line Kansas City, Missouri 64114 Phone: 816-361-3400

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